

# Administration will continue to oppose attempts to block Babb from speaking: Connell

by George Cook

U of T President George Connell has expressed "satisfaction and relief" at the decision of Ontario Supreme Court Justice Jean Marc Labrosse not to grant an interim injunction to prevent South African Ambassador Glenn Babb from speaking on campus.

"I would have preferred to see that application (for the injunction) decisively quashed so that it would not come up again, but if there is any

further repetition of such tactics we will continue to oppose them as vigorously as we possibly can," Connell said at a news conference Jan. 15.

He said the University intends to uphold the Governing Council's 1974 statement on the protection of freedom of speech. The policy, adopted following an incident in which American sociologist Edward Banfield

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UNIVERSITY OF TORONTO

## Bulletin

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### UTFA negotiations go to mediation

A mediator will be called in to assist the University of Toronto Faculty Association and the administration reach a salary settlement for 1986-87 for faculty members and librarians.

The major stumbling block appears to be disagreement as to the nature and purpose of the system of progress-through-the-ranks (PTR), which has been in operation since 1974 and which the administration considers not only recognizes career progress based on merit but also contributes to the competitiveness of the salaries. UTFA is arguing that the PTR component of salary increases should not be represented as part of their compensation for inflation. The association insists that if the economic increase is not maintained as the instrument for keeping pace with changes in the cost of living, many of its members will suffer a serious decline in their standard of living.

UTFA is also objecting to a proposal by the administration that the economic increase be applied to the floor for a rank, so that, for example, an associate professor earning a salary of \$47,000 would receive an increase based on a salary of \$33,200.

A statement by the administration's negotiating team to the *Bulletin* says in part: "The negotiations have been informative and constructive, but we have not yet arrived at a settlement." A statement by UTFA says: "There has been very little progress made in

negotiations thus far, and the UTFA team believes that the conduct of negotiations by the administration is chiefly responsible. President Connell's team has not responded to the majority of the UTFA proposals and has been slow to table its own, preferring instead to lecture UTFA representatives on the principles of wage economics."

Negotiations will continue this week while a mediator is being selected. The two teams have been meeting since the middle of December. Under Article 6 of the *Memorandum of Agreement*, if agreement on salaries is not reached by Jan. 15 a mediator is to be appointed.

### Cuts of \$6.1 million recommended for 1986-87

by Judith Knelman

U of T must cut \$6.1 million from its budget projections in order to avoid a deficit in 1986-87, says Dan Lang, assistant vice-president (planning) and registrar. According to the budget guidelines presented to the Planning & Resources Committee at a special meeting Jan. 6, the University already has a deficit of \$955,000 as a result of the salary settlement for 1985-86, and the figure could rise to \$1.5 million before the end of the fiscal year, April 30, unless spending is deliberately depressed.

The guidelines, approved by the committee and sent on to Governing Council (see story p. 3), warn that if no action is taken to correct the shortfall, the deficit will increase to at least \$14.4 million in 1987-88 — a figure that would exceed the 1.5 percent of operating income allowed by Governing Council — and will continue until corrective action is taken. "As unfortunate as a \$7.2 million shortfall in funding is," say the guidelines, "it is neither artificial nor avoidable."



Lawyer Charles Roach and Professor Peter Rosenthal leave the courthouse after an unsuccessful attempt to obtain an injunction preventing U of T from sponsoring an event at which a representative of the South African government would speak

### February vote set for UTSA memorandum of agreement following latest survey of members

by Arthur Kaptainis

A U of T Staff Association (UTSA) questionnaire has revealed strong support — among respondents — for the memorandum of agreement by which the association hopes to

formalize collective negotiations with the University.

UTSA mailed a copy of the memorandum, modelled after the faculty association's agreement, to its approximately 1,800 members in early December along with a letter of explanation and a one-page questionnaire. By early January, 346 responses had been received, showing substantial majorities in favour of an agreement reached outside rather than within the Ontario Labour Relations Act, and one that covers staff policies as well as negotiating procedures.

A controversial proposal that payment of association dues be a condition of employment was favoured by 270 respondents, with 75 opposed.

The questionnaire presented members with three options with respect to the legal status of a prospective memorandum of agreement with the University. The first, preferred by 231 of 332 respondents, posited a voluntary agreement reached outside the Labour Relations Act, under which disputes would be resolved by binding arbitration, with no resort to strikes and lockouts. The second, preferred by 61, would exclude managerial personnel as defined by the act, while the third, chosen by 40, would involve prior recognition of the association under the act, entitling it to take strike action before a voluntary agreement is reached.

In a letter accompanying the questionnaire, UTSA president David Askew said the UTSA board believed

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was prevented from delivering a lecture, states: "Our ability to question and debate any subject requires as a prerequisite the freedom to speak, keeping in mind that all persons are, of course, subject to the law of the land. It is not possible to compromise this freedom, since no middle ground exists."

"The policy has no qualifications," Connell said. "The right of freedom of speech is extended to everyone without reservation and I support that position."

"I was deeply concerned that some members of the University community saw fit to initiate steps that might have led to constraint upon freedom of speech. They sought the intervention of the courts in a form which might effectively have introduced censorship on the University campus," he said.

"I recognize that with respect to the situation in South Africa there are

many people on the campus who hold very strong views. I do myself. I am not aware of any individual in the University community who has any sympathy whatsoever for the policies of apartheid, but that set of circumstances does not modify in any way our resolution with respect to the protection of freedom of speech."

"I do not believe we can fulfil our mission as an educational institution unless we are prepared to allow members of this institution to hear views, if they wish to hear them, which we may judge to be inappropriate or offensive in any way. That guaranteed right to speak must remain one of the strong pillars of the University."

Connell's news conference followed the decision earlier in the day by Mr. Justice Labrosse not to grant the interim injunction sought by four faculty members. Professors George Bancroft, Faculty of Education, Fred Case, Department of French, Keith Ellis, Department of Spanish & Portuguese, and Peter Rosenthal, Department of Mathematics, sought the injunction to prevent the University from hosting any event at which an official representative of the government of the Republic of South Africa would speak.

At the Wednesday morning Supreme Court hearing, Ken Cancellara, the University's lawyer, presented an affidavit to show that the invitation to Babb to participate in a debate sponsored by the International Law Society had been withdrawn and that no further dates had been set for his appearance on campus.

Charles Roach, the lawyer for the four professors, argued that there are two invitations to the South African ambassador outstanding — one from Hart House, where Babb was prevented from speaking Nov. 14, and one from a newly formed group of law students calling itself Lawyers for Fundamental Freedoms.

However, the judge said that until an invitation is accepted and a date and topic of discussion set, the consideration of an application for injunction is unwarranted. "An interim injunction would be a discretionary remedy for something which may never happen. If you (Roach) find out it will happen you are free to bring your application," Labrosse said.

"I'm not going to grant an interim injunction — an extraordinary remedy — for something that may never

happen," he said.

The four professors were seeking the interim injunction pending full consideration of their application for a permanent injunction banning the South African ambassador and all other official representatives of the South African government from speaking on campus.

In their application, the four requested the injunction on the grounds that apartheid is "a crime against humanity and no one in Ontario may aid, promote, support or encourage the commission of the crime of apartheid."

They also argued that any invitation by the University to a representative of the South African government to speak on campus constitutes a violation of their rights under the Canadian Charter of Rights and Freedoms. They went on to say that any act that directly encourages support for apartheid is a violation of those sections of the Canadian Criminal Code prohibiting the promotion of hatred.

Finally, they said support for apartheid violates both the Ontario and the Canadian Human Rights Codes.

Despite their initial setback, Roach said his clients will return to court to seek an injunction should a date be set for a visit by Babb to the campus.

In an interview following the hearing, Ellis confirmed that the four will reapply for the injunction if another invitation is issued. However, he also said he hopes members of the University community have come to a fuller understanding of the importance of taking action to oppose apartheid and will settle the matter internally.

The current controversy erupted in November when the Hart House Debates Committee invited the South African ambassador to participate in its proceedings. In the resulting disturbance one man was charged with assault after an attempt was made to strike Babb with a ceremonial mace. An ensuing demonstration forced cancellation of the debate.

According to the University policy on freedom of speech, anyone prevented from speaking on campus must be invited to return. This provision was carried out by the warden of Hart House, although no date has yet been set for a return visit. The invitation to the law faculty came from students in the International Law Society, who scheduled a Jan. 16 debate on the application of international law in South Africa. The ambassador was to face Montreal human rights lawyer Irwin Cotler.

The announcement of that debate brought the application for the injunction and at least two petitions to President Connell, launched by faculty members denouncing the racist policies of South Africa and urging the University not to invite Babb to speak.

Professors Case and Ellis, accompanied by Roach, held a news conference in Hart House a day before the matter came before the Supreme Court of Ontario to explain their opposition to Babb's visit. They praised the University for its high academic and moral standards and challenged invitations to government representatives from South Africa on the grounds that they are inconsistent with those standards.

"By extending such an invitation to an agent of apartheid, the U of T is undermining its reputation and has insensitively ignored the rights and feelings of members of the University community," Case said.

"The fundamental right of equal dignity irrespective of race, which is the policy of Canada, is being threatened by the introduction of this agent of apartheid into our working

environment."

"As a scholarly institution this university is dedicated to the pursuit of knowledge through academic freedom. But academic freedom does not include the promotion of criminal acts."

"We have been compelled to take this serious step out of our concern that this university not be complicit in the promotion of the criminal policy of apartheid."

At the time of their news conference, however, the International Law Society (ILS) had already withdrawn its invitation to Babb and cancelled the debate because they did not wish to appear to be lending tacit support to apartheid by welcoming Babb.

Their decision provoked a rash of media stories, including several segments on the CBC national television news and editorials in the Toronto newspapers. In two separate editorials *The Globe and Mail* condemned the withdrawal of the invitation to Babb, citing the University's responsibility to freely entertain unpopular opinions for educational purposes.

In the wake of the ILS decision and the media coverage, two U of T law students, Tony Clement and Alan Riddell, announced that they would form a new group — Law Students for the Application of International Law — with the intention of inviting Babb back to campus for a debate with Cotler or another participant.

In an interview, Clement who is chairman of the Campus & Community Affairs Committee, said the new group has drawn up a constitution and, under a new name — Lawyers for Fundamental Freedoms — will apply to the dean of law and the University for recognition as a campus group.

Clement said the South African ambassador has already supplied him with a series of possible dates for his return to campus. As soon as the new group receives recognition an official invitation to Babb will be issued.

Clement said the earliest possible date for the debate is the end of the month, although he did not specify an exact date.

## INNOVATIONS FOUNDATION

### The Trivial Pursuit of Intellectual Property

1. Can you patent after you have published?
2. Can you license an invention without a patent?
3. Does the University's Inventions Policy depend on patentability?
4. What does it cost to obtain a patent?
5. Can you conduct a patent search yourself?
6. Does a patent grant a monopoly right to the inventor?
7. Who takes out Canadian patents?

#### Answers

1. Yes, but only in the U.S. and Canada — within one year of the U.S. with two months in Canada. If published only in the U.S., within two months in Canada.
2. Yes, but only in the U.S. and Canada — within one year of the U.S. with two months in Canada. If published only in the U.S., within two months in Canada.
3. No (briefly).
4. From \$2,000 to \$10,000 (depending on complexity).
5. Yes, patent law is open to the public and does not require a patent agent. Filing in ECC countries costs \$5,000, in Japan about \$2,000.
6. A patent does not give an inventor the right to make, use or sell his own invention, but rather grants the inventor the exclusive right to exclude others from making, using or selling his own invention. For the negative right to exclude others from making, using or selling his own invention, an inventor must obtain a patent.
7. Primarily foreign-born, who file 95% of applications according to the Patent Office.

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# Discussion on Babb, architecture dominates Governing Council meeting

Tense debates on the current boycott of classes by architecture students and the administration's position on future appearances of South African ambassador Glenn Babb on campus made for a lengthy and frequently acrimonious Governing Council meeting Jan. 16.

The Babb discussion followed President George Connell's reiteration, during the President's Report, of his intention to abide by the 1974 Governing Council policy statement on freedom of speech. He also expressed his approval of the recent denial of an injunction application by four U of T professors (see story, page 1), regretting only that the application "was turned aside on a technicality" rather than on the basis of the "substance" of the issue.

"It would be to me, and I suspect to Council, extremely unwelcome to have the courts intervening in a matter in which we have the ability and the authority to make the appropriate judgements," said Connell.

Connell disagreed with the view that an invitation to Babb constitutes an "honour" bestowed by the University. "Extending to individuals the right to speak on campus does not in any way imply approbation by the University, nor, in most cases, does it imply approbation by the group extending the invitation."

"Any group has the right to invite any person to speak on the campus," Connell concluded.

Graduate student Cathy Laurier responded to this instantly by ex-

pressing her "disgust" with the president's position. "Glenn Babb is not just a person expressing a point of view," she said. "As an ambassador he must not express his own opinion, but only the opinion of the government he represents."

Michael Jackel, administrative staff member, then challenged the view, which he attributed to Connell, that resistance to Babb's appearances came from a small minority on campus. Isn't it rather the case, he asked, that a majority of people who live and work on campus deplore the appearances, while a minority "within this chamber" support them?

Defenders of the University policy then entered the debate, including full-time undergraduate Maxwell Evans, who commented that a Hitler should not be prevented from speaking if asked. Laurier responded by asking Connell whether he would tolerate an appearance by James Keegstra. "Whatever the circumstances, I would uphold the policy," Connell replied.

Faculty representative Mike Uzumeri, displeased as he was by the October invitation to Babb, said the 1974 policy is unambiguous. "There are no options, there is no debate," he said. "The only debate is whether to rescind the policy." There were further thrusts and parries from various members, but the confrontation was put to an end when government appointee Douglas Grant successfully moved to "cease this debate at this time."

The architecture debate, which

surged ahead in spite of Connell's explicit requests for forbearance, also began in discussion of the President's Report, after Connell called upon professional faculties vice-provost James Keffer to give a brief review of the architecture situation.

Keffer reported that Acting Dean Peter Wright had extended the Jan. 17 deadline for course enrolment to today. (See story, page 5.) A student resolution paper had been received by the administration, he said, demanding, among other things, the removal of Wright and acting architecture program chairman Douglas Lee from office, which the administration was not willing to consider "at this time."

This opened the floodgates. Presidential appointee James McConica requested assurance that the search for a permanent dean would conclude soon. He also urged clemency in dealing with the students, arguing that normal rules do not apply in a "state of disorder."

To this Uzumeri countered that the absence of a permanent dean is a "surface problem" masking more fundamental difficulties in the school, and the real disorder is in the minds of the people who advocate a disorderly school.

Graduate student Fawn Currey then asked Connell about the future of students who continue to ignore

*Continued on Page 4*



Peace books donated

Representatives of the Canadian chapter of the Japanese lay Buddhist organization, the Nichiren Shoshu Sokagakkai, last week presented Chancellor George Ignatieff (left) with two sets of a 25-volume collection, in English, of writings on world peace and religion. One will go to the Emmanuel College Library, while the other will go to the peace studies collection of the Laidlaw Library. The Sokagakkai is the largest lay religious organization in Japan, with over 10,000,000 members. It will be sponsoring an exhibition in May at U of T on nuclear arms which will include Hiroshima artefacts. Seen here with Ignatieff are Mickey Mashuda, vice-chairperson of the Canadian chapter and Doug Jay, principal of Emmanuel College.

## OISE-U of T negotiations suspended Government willing to delay transfer

by Judith Knelman

Negotiations between the Ontario Institute for Studies in Education (OISE) and the University of Toronto have been suspended on the orders of the institute's board of governors.

However, a request from the board to Premier David Peterson that the government's plan for a transfer of OISE to U of T be dropped has been rejected. In a reply to the chairman of the board, W.A. Jones, dated Jan. 8, Ontario Treasurer Robert Nixon says the government still wants a unified structure of governance and administration with U of T. If the University is prepared to extend its current affiliation agreement with OISE, says the letter, the government would be willing to delay the timing of the fiscal transfer, which it hoped to implement in 1986-87.

On the recommendation of President George Connell, the Academic Affairs Committee has approved the extension of the affiliation agreement for one year. The recommendation goes to Governing Council next month. An affiliation agreement is necessary because though OISE teaches graduate students it does not have the power to grant degrees.

At a special hearing of the standing committee on social development of the Ontario Legislature Jan. 15, Bernard Shapiro, director of OISE, said he was not prepared to discuss a transfer. "I think it is probably the case that those who hold such a negative view believe that under the present affiliation agreement the institute has all the benefits of linkage

to the University of Toronto that are deemed to be desirable," Connell told the committee. "The further step proposed by the treasurer might appear to introduce some constraints, but not further benefits, at least none which can be easily discerned by critics of the measure." He went on to say that there may in fact be substantial benefits if OISE and the Faculty of Education are integrated.

Though he maintained that the University would not be "negatively disposed" towards certain programs and activities of OISE, Connell could not assure the committee that if the transfer were to come about the money generated by the institute would remain totally within its control. It would, like other funds, go into the University's budgetary process.

The OISE board of governors has asked that negotiations on the third affiliation agreement, suspended after Nixon's announcement in the Oct. 24 budget that there was to be a transfer, be resumed. The discussions this time should include the possibility of a new and more substantial relationship between OISE and the Faculty of Education, says the board. U of T administrators are unable to come to a decision on this request, said Connell, until the government's action is clarified.

The leaders of the NDP and Progressive Conservative parties have vowed to block passage of a bill in the legislature amending the OISE Act unless it is clear that OISE concurs with the new arrangement.

## UC symposium on conservatism

This year's University College symposium will examine conservatism in literature, history, philosophy, politics, education, the arts and religion. It begins Jan. 21, with a concert by the Orford String Quartet and the opening of a contemporary Polish play, *Tango*, and continues through Jan. 25, with a series of free lectures.

Among the speakers from outside the University will be Lloyd Dennis, co-author of the Hall-Dennis report on

education in Ontario, *Living and Learning*, Tom Axworthy, former aide to Pierre Trudeau, Christopher Lasch, an American historian and social critic and author of *The Culture of Narcissism*, Michael Walker, director of the Fraser Institute, and Larry Grossman, leader of the Ontario Progressive Conservative party. (Details in Events listings or from Carol Robb at 978-8746.)

## Correction

In the *Bulletin* of Jan. 6, it was reported that McGill University's Board of Governors had unanimously adopted a policy of full divestment of its South African holdings. In fact, five separate motions were passed on the subject: three unanimously, one with four abstentions and a fifth, 17 to four.

Approved were resolutions calling for the immediate disposal, "in an orderly and responsible fashion," of McGill investments in

- financial institutions that continue to make loans to the South African government and its agencies (unanimous)

- corporations controlled directly or indirectly by South African interests (unanimous)
- corporations with direct investments in South Africa (17-4).

With no dissenting votes and four abstentions, the board also instructed the administration to make no new investments in the above-mentioned institutions. It further agreed, unanimously, to an annual review of its policies on divestment.

Attendance during the course of the Nov. 18 meeting varied between 21 and 23 of the board's 44 members.



## Governing Council

Continued from Page 3

registration deadlines, and thus risk losing their term. Connell responded that to discuss the issue at that time would be counterproductive.

However, Douglas Grant continued the discussion, asking questions about a past unflattering assessment of architecture by a professional architects' society, while academic affairs chairman Kenneth McNeill said the matter was sufficiently urgent to merit a debate by Council. Then an architecture student, invited to address Council at the urging of Laurier, said the issues for the students and sympathetic staff were academic excellence and "pedagogical plurality".

At this juncture Connell attempted to stem the tide by assuring Council the matter was receiving "virtually constant attention" from the provost's office. "With due respect to Council," he said, "I think the best way of addressing the issue during the next few days is to entrust it to the care of the provost. She will be, of course, accountable to academic affairs. I strongly urge you at this time not to continue discussion in this forum."

Laurier and Currey nevertheless pressed Connell on the question of academic penalties for dissenting students. Finally, Council chairman St. Clair Balfour advised the assembly it would be impolitic to make a yes or no decision on the matter at this time. This quelled the controversy until Currey moved later in the meeting that a special meeting of the Academic Affairs Committee be convened to con-

sider the issue of academic penalties.

After much debate on the appeal options available to students so penalized, the need to trust the judgement of the administration, and the wisdom of Council incursions into matters of management, the motion was defeated by a two-thirds majority.

Another issue briefly mentioned in the President's Report was Connell's meeting with an Ontario Legislature committee concerning OISE. (See story page 3.) Connell said he reiterated the sentiments expressed to Council in the last meeting.

Earlier in the meeting, substantial debate attended the motion of full-time undergraduate Tony Clement to approve in principle the deletion of Canadian citizenship as a prerequisite to membership in Governing Council. Several members expressed opposition to the proposal on nationalist grounds, but the motion prevailed by a margin of about two-thirds. It calls for an appropriate amendment to the U of T Act, when such changes are opportune. In practical terms, Balfour explained, this means when governments are less inclined than at present to dictate the priorities of universities.

Also approved by Council were:

- the budget guidelines for 1986-87
- the 1986-87 tuition fee schedule
- the Natural Resources Centre project at a cost of \$46.1 million (*Bulletin*, Jan. 6)
- the 1986-87 capital requests list
- the naming of the law library as the Bora Laskin Law Library

## Notebook

The fourth of the Brindale Dons' Brunch and Speaker Series, this Sunday at 11, will feature Jean Chretien speaking on the topic, "Canada". Part of the attraction of Brindale for the former finance, energy, and justice minister is the campus's lively French program. Two campus townhouses are now set aside for 10 students who wish to speak French only. If all goes according to plan, these students will occupy the 11-room Haisti House — a family dwelling before the property was purchased by Brindale — next academic year. The residence will be renamed French House, and serve also as an activities centre for bilingual students.

Another Ottawa Liberal will speak this week at U of T on one of his favourite subjects. John Turner, federal Liberal leader, will be the honorary visitor Jan. 21 at the Hart House debate "Be it resolved that this house has no confidence in the present government of Canada". The debate begins at 7.30 p.m.

The Graduate Astronomy Students' Association has a fail-safe method of raising funds for its social events: collecting paper and selling it to the recycling firm of Buscombe & Dodds. Two trips last year netted them \$242.32 from a 5,280-lb. payload of astronomy department newspaper, computer cards and printer paper. At that rate of exchange, a Simcoe Hall paper collection might ... well, use your imagination.

Memorable is a good word for the new year's sojourn in Paris enjoyed by Paul Carson, U of T's sports information officer, who was part of the CIUT broadcasting team in Davos, Switzerland covering the Spengler Cup hockey tournament. When he arrived at his hotel, the Madeline Palace, on New Year's Eve, all that seemed amiss was a room that was bizarrely fresh and clean. "It was a four-star hotel," he remembers, "but to say this room was spotless would be an understatement." The next day he noticed a curiously large population of soldiers scouting the area around the hotel. The plot thickened when Mel Raskin, the alumnus who secured the broadcast rights for the station, told Carson about an arrest made by the police on Dec. 23. The hotel, "a

short grenade's lob to the Tuileries", as Carson puts it, was the camping ground for a group of terrorists who had planned to blow up a synagogue. One of three rooms used was Carson's. "So then we put things together," he said. "The room was in such immaculate condition because the police had torn it apart, and the staff had to reassemble it just as meticulously."

The Department of Communications has been temporarily renamed Trivia Hall of Fame, to honour fact-happy *Bulletin* writer Arthur Kaptainis and production coordinator Chris Johnson. Tonight, both start a new season as defending champions in the Toronto Pub Quiz League, a gathering of 48 five-person teams that engage in weekly factual fisticuffs "at home" or "away" pubs around the city. Kaptainis is a member of Murder, Inc., the all-around victors in the league's fall 1985 season, while Johnson hails from the Skolastics, the handicap winners. (The Skolastics, attached to the Faculty Club, also count slavic languages professor David Huntley and UTCs supervisor Barry Lay among their members.) Although both Kaptainis and Johnson deported themselves like true smart Alecs at the December playoff night, there is no respite for champions: the occasional grumble can still be heard at 45 Wilcocks over the correct identity of The Galveston Giant (not John L. Sullivan) and the work that occasioned Linda Ronstadt's stage debut (not *La Bohème*).

That's gratitude for you: Harvard University has turned down a gift from an alumnus of 15 percent of the stock in a company he had formed to extract the active ingredient in marijuana. According to a recent issue of the *Chronicle of Higher Education*, the university sent back 180 shares in the Cannabis Corporation of America when the company's founder began to name Harvard as a shareholder in a solicitation letter to prospective investors. The delay in rejecting the gift, offered last July, was due to "administrative inefficiency", the university says, while the benefactor, whose company has yet to earn any revenue, claims indignantly that Harvard had already accepted the gift with a document stamped "received".

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## Job Openings

Below is a partial list of job openings at the University. Interested applicants should read the Promotional Opportunity postings on their staff bulletin boards and submit a written application to the Personnel Department to apply for a specific position.

(1) Sylvia Holland; (2) Steve Dyce; (3) Varujan Gharakhanian; (4) Christine Marchese; (5) Maureen Brown; (6) Mirella Tahariol; (7) Lisa Rafitis.

**Clerk Typist I**  
(\$14,510 - 17,070 - 19,630)  
Industrial Relations, temporary (9), Erindale (9)

**Clerk Typist III**  
(\$15,930 - 18,740 - 21,550)  
Hart House (3)

**Secretary I**  
(\$15,930 - 18,740 - 21,550)  
Academic Statistics (1), Ophthalmology (1), Medicine, part-time (1)

**Secretary II**  
(\$17,470 - 20,550 - 23,630)  
Pathology (1), Mechanical Engineering (5)

**Administrative Assistant I**  
(\$19,450 - 22,880 - 26,310)  
Surgery (1), Research Administration (1)

**Administrative Assistant III**  
(\$30,970 - 36,440 - 41,910)  
Research Administration (1)

**Laboratory Technician II**  
(\$19,450 - 22,880 - 26,310)  
Ophthalmology (1), Medicine, part-time (1), Banting & Best Medical Research (9)

**Laboratory Technician III**  
(\$21,480 - 25,270 - 29,060)  
Pathology (1), Pharmacology (9), Banting & Best Medical Research (9)

**Applications Programmer Analyst II**  
(\$23,850 - 28,060 - 32,270)  
Information System Services (3), Business Information Systems (3)

**Applications Programmer Analyst V**  
(\$33,270 - 45,020 - 51,770)  
Information System Services (3)

**Human Resource Officer II**  
(Personnel Officer II)  
(\$30,970 - 36,440 - 41,910)  
Royal Conservatory of Music (1)

**Assistant Manager Telecommunications**  
(\$34,400 - 40,470 - 46,540)  
Physical Plant (1)





**Kunov named Big Brother of the Year**

Electrical engineering professor Hans Kunov, 47, is 1986 Metro Toronto Big Brother of the Year. Kunov is seen here with little brother Jason at a Big Brother soap box derby. During his six-year involvement in the Big Brothers' program, Kunov has helped Jason become more independent and improve academically; much of their time together is spent woodworking, skating and working on Kunov's computer. Following presentation ceremonies at Maple Leaf Gardens Jan. 12, Jason, in answer to a television reporter's question, said having Kunov as a big brother had changed his life.

## Report by ad hoc group on status of women

The University's Ad Hoc Committee on the Status of Women has issued a report calling for the appointment of a full-time affirmative action officer for staff, an increase in the number of women on the faculty, and guidelines for non-sexist teaching. The report appears in a special supplement of today's *Bulletin*.

The University should state clearly that sexist and racist jokes and remarks are unacceptable in University lectures and publications, says the report, and support this stance with a program of workshops for academic and staff administrators.

Mature women students be actively recruited and supported, women's athletics should be given funding and support equal to that given to men's athletics, administra-

tive staff should be given office space that reflects their work situation rather than hierarchy, and academic departments should formulate objectives, schedules and means to increase the representation of women at all levels, says the report. It recommends a three-year review of the University's overall progress on the advancement of women in the form of a report by the Status of Women officer to Governing Council and the University community.

The Ad Hoc Committee was formed in February 1984 and began meeting regularly the following September. The authors of the report represented all constituencies and all three campuses. Chair of the group is Annabel Cohen, a research associate in psychology at Erindale College.

## Wright standing firm in face of student boycott

Third and fourth year architecture students who have not ballotted for design studio programs by 5 p.m. today will have chosen not to complete their year, says Acting Dean Peter Wright. The students staged a boycott as a protest against the offerings, some of which they say are too technical.

Students and faculty members presented a petition to President George Connell Jan. 15 calling for the addition of options and the replacement of Acting Dean Peter Wright by a new acting dean pending the appointment of a permanent dean. He has maintained that though the list was broader than the students might have expected, there were more choices than there were last year, and that many strong design studios were still being offered, and the wider choice might in fact be desirable. The eight programs include designs for Huron Street, a museum, a housing project, an energy conservation laboratory, accommodation for kangaroos and duck-billed platypuses, Port Hope's main street and transit stations and a study of developers' needs in terms of architecture. The most popular choice, the design of a museum, has been made into a double studio.

The students had earlier accepted three choices arranged by George Baird, who resigned as acting program chairman of architecture in October, but rejected the rest of the list, which was put together by Baird's successor, Douglas Lee.

The students have asked for the replacement of Lee as well as Wright. They maintain that senior faculty members are responsible for what they say is the discredited state of architecture in the past decade and blame Wright for having restored these instructors to positions of power and authority. The low morale among the rest of the faculty threatens to provoke an exodus of many of the teaching staff, say the students.

The students have also asked that a committee of faculty members and students be created to advise the administration on the needs of the program and on matters relating to the search for a dean. They want a statement of support from the administration.

The Faculty of Architecture & Landscape Architecture has been without a dean since the departure of Blanche van Ginkel in 1982. Jacob Spelt, a geographer, was named dean *pro tem*. After two years of continuing unrest and upheaval in the faculty, Spelt was succeeded by Wright, a civil engineer. Meanwhile, as the result of a difference of opinion with Spelt, the chairman of architecture, Antonio de Souza Santos, resigned in 1983, to be replaced by Baird as acting chairman.

The decanal search committee was reconstituted in 1984 in response to charges of bias. It came up with two candidates last fall, neither of whom the University was able to come to terms with.

Wright maintains that the boycott of studios is being used as a means of forcing him to leave the faculty. In November and December, a majority of the students and of the faculty delivered petitions to the administration demanding, among other things, his replacement. He was advised in mid-December that there was a distinct possibility if the petitioners did not get what they wanted that the spring option studios would be the focal point for applying pressure.

He believes that the real issue in the current unrest is the interim leadership by someone from outside the faculty until a permanent dean is appointed.

"The students are latching on to this as a chance to voice their concern for the University's inability to get a dean," says Vice-Provost James Keffer. "There was a great deal of heightened emotion engendered by the search." He plans to wait until the reaction has died down before reconvening the search committee.

Wright has a sabbatical coming on July 1, 1986, but is willing to put it off for a year if necessary, though he says sometimes he feels as though he's operating in a democratic country in which the majority are revolutionaries. "There has been trouble in this faculty for 20 years," he says. "Some of the traditions have to be broken if order is to be permanently reestablished."

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**Dons at  
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Six academic dons (Computer Science, English, French, Natural Science and Social Science) required for 1986-87. Enquiries to the Dean of Arts, Trinity College, 6 Hoskin Avenue, Toronto, Ontario M5S 1H8 (978-2129).

Three residence dons for women's residence required for 1986-87. Enquiries to the Dean of St. Hilda's College, 44 Devonshire Place, Toronto, Ontario M5S 2E2 (978-2254).

Applicants should be enrolled in a graduate or a professional program or pursuing post-doctoral studies.

Applications must be submitted by March 1, 1986.



# RESEARCH NEWS

**Environment Canada**  
Approval has been announced for the Canadian Wildlife Service university research support fund for 1986-87 to provide financial assistance to registered graduate students for research in the field of wildlife. The proposed project must deal with any species of wildlife, or wildlife communities, or wildlife habitats; projects dealing with fishery resources are excluded.

The applicant should be a university professor at a Canadian university and: (a) the principal supervisor of a student registered for post-graduate work and assigned to the proposed project; (b) performing research in Canada; (c) the supervisor of a student with Canadian citizenship.

Financial support in any year will not exceed \$2,500. Please note that overhead should be included in the budget at the Canadian federal government rates (see ORA Information Booklet).

The deadline date for submission of completed applications is **March 19**.

**Medical Research Council**  
Please note that for the **February 1** deadline, a revised application form MRC 11 (1985) for operating/major equipment/maintenance grants is available. MRC has indicated that old forms will not be accepted.

**Signatures**  
All necessary signatures must be obtained prior to bringing the application to ORA. These may include chairman, dean, hospital director, college principal, co-investigator, computer approval and others. Consult the ORA booklet, *Information: Research Policies & Procedures* (August 1985), for signature requirements. It is available from departmental assistants and the Faculty of Medicine research office.

**Resource Implications Brief**  
For new applications from the health sciences with a value of \$200,000 or more per annum, a "resources implications brief" signed by

the appropriate dean and/or principal, should accompany the application when it is submitted to ORA. Information on the brief may be found on pages 11-12 of the ORA Information booklet. Because the review procedure for these large applications is more detailed, the turn-around time for signature will be somewhat longer than for other submissions.

**Research Involving Human Subjects and Biohazards**  
MRC requires applications for research involving human subjects and biohazardous materials to include form MRC 33 (1982) *Research Involving Human Subjects*, or MRC 34 (1979) *Biohazards Containment Certification*. Copies of these forms may be obtained from ORA or the research office of the Faculty of Medicine. Please complete and include the appropriate form with your application.

**Copies**  
Please bring to ORA the original application for University signature plus one copy for University retention. Clipped to the copy should be a completed ORA 5 form plus, where applicable, ORA 2 (animals), ORA 3 or 7 (humans), or ORA 10 (biohazards). Also please attach to your application a telephone number where you can be reached, whether for questions or for notification when your application is ready to be picked up.

Individual departmental or faculty conditions regarding applications should be accommodated before submission to ORA. Applications are reviewed on a "first-come, first-served" basis and during a heavy applications period, additional time should be allowed for processing. Thank you for your help.

**Natural Sciences & Engineering Research Council**  
A limited number of awards intended to foster research on the flora and fauna of the Canadian Shield are available under a new program. These awards are specifically to conduct

research at the Canadian Shield Foundation Research Facility near High Lake, Manitoba/Ontario. Awards are available to graduate students and post-doctoral fellows. The deadline for this competition is **January 31**.

**Upcoming Deadline Dates**  
Alcoholic Beverage Medical Research Foundation — research grants: **February 1**.

Amyotrophic Lateral Sclerosis Society of Canada — research grants: **January 31**.

Atkinson Charitable Foundation — investigators in the Faculty of Medicine. Internal deadline at the research office of the faculty **March 17**; investigators in other faculties, deadline at ORA **April 20**.

Canadian Foundation for Ileitis & Colitis — research grants: **March 1**.

Canadian Heart Foundation — symposia and workshops: **March 1**. Canadian Paraplegic Association (Ontario Division) — research grants: **February 15**.

Canadian Physiotherapy Association — personnel awards: **February 1**.

Canadian Psychiatric Research Foundation — research grants: **February 1**. Cancer Research Institute Inc. (US) — fellowships: **February 1**.

J.H. Cummings Foundation — Please note: deadline changed for February competition.

Damon Runyon-Walter Winchell Cancer Fund — fellowships: **March 15**.

Environment Canada, Canadian Wildlife Service — university research support fund: **March 19**.

Fight for Sight Inc. — grants-in-aid, fellowships: **March 1**.

Fuller Fund (Anna) — fellowships, project grants: **February 1**.

Hannah Institute for the History of Medicine — studentships: **February 1**. Health & Welfare Canada (NHRDP) — fellowships: **February 15**.

Hospital for Sick Children Foundation — research

grants: **February 1**. Juvenile Diabetes Foundation (US) — research grants: **March 1**.

Leukemia Research Fund — research grants, fellowships: **February 3**. Louis & Arthur Lucian Award (McGill University) — nominations: **March 15**.

Medical Research Council — major equipment, new operating and maintenance grants, development grants (category 1), biotechnology development, subject research (preliminary proposal), MRC scholarships: **February 1**; travel grants, workshops and symposia: **March 1**.

NCIC — career appointments, training and study awards (including Steve Fonyo studentships): **February 1**.

National Foundation for Ileitis & Colitis — personnel awards (citizenship restriction): **February 1**.

National Institutes of Health (US) — new research grants, new and competing continuation: **February 1**; competing continuation and supplemental research grants: **March 1**.

National Multiple Sclerosis Society (US) — research grants, junior faculty awards, fellowships: **February 1**.

National Retinitis Pigmentosa Foundation — research grants: **March 15**.

Natural Sciences & Engineering Research Council — Canadian Shield Foundation research awards: **January 31**; vector computer access: **February 1**.

bilateral exchange program: **March 1**; international scientific exchange awards, international collaborative research grants, CIDA-NSERC associations: **March 15**.

U of T — Humanities & Social Sciences Committee, Research Board — grants-in-aid: **February 1**; Life Sciences Committee, Research Board — summer graduate program, summer undergraduate program: **February 28**.

Whitehall Foundation Inc. (US) — research grants, grants-in-aid: **March 1**.

## PhD Orals

Please contact the PhD oral examination office at 978-5258 for information regarding time and location for these listings.

**Monday, January 20**  
Simon Charles Capstick, Department of Physics, "Baryons in a Relativized Quark Model with QCD." Prof. N. Isgur.

**Wednesday, January 22**  
Anupama Bhardwaj Keats, Department of Education, "Development of a Test of Criminal Thinking Based on Yochelson and Samenow's Criminal Thinking Errors." Prof. K. Henderson.

**Thursday, January 23**  
John Joseph Del Grande, Department of Education, "Can Grade Two Children's Spatial Perception Be Improved by Inserting a Transformation Geometry Component into Their Mathematics Programs?" Prof. H. Russell.

Barry Noel Leighton, Department of Sociology, "Experiencing Personal Network Communities." Prof. B. Wellman.

Eoin Murphy, Department of Education, "An Approach to Vocational Training of Disadvantaged Working Class Youth." Prof. G. West.

Marcela Bitran Speisky, Department of Pharmacology, "Effects of Vasopressin on Alcohol Tolerance: Sites of Action and Neurochemical Correlates." Prof. H. Kalant.

**Friday, January 24**  
Michael Francis Haley, Department of Chemistry, "The Photochemistry of C-N Double Bonds." Prof. K. Yates.

L.D. Danny Harvey, Department of Geography, "A Three-Level Energy Balance Climate Model with Topography, Explicit Radiative Transfer, and Explicit Sea Ice and Snow Mass Budgets." Prof. K. Hare.

Sandra Lynn Hutchison, Department of English, "Form and Vision in the Poetry of Dorothy Livesay, 1919-1984." Prof. F.W. Watt.

Padraig Gerold O'Seaghdha, Department of Psychology, "The Dependence of Lexical Relatedness Effects on Syntactic Connectedness." Prof. C.M. MacLeod.

**Monday, January 27**  
Peter Hynes, Centre for Comparative Literature, "Models of Reading in the 18th-Century Epistolary Novel." Prof. O.J. Miller.

Dennis Anongo Itayvay, Department of Sociology, "The Development of Health Services in Nigeria, 1960-1985." Prof. J. Wayne.

Joan Marie McDowd, Department of Psychology, "An Investigation of Age Differences in Divided Attention Performance." Prof. F.I.M. Craik.

Aminur Rahim, Department of Education, "Class, Education and Nationalism in Bangladesh." Prof. D. Livingstone.

**Tuesday, January 28**  
Denis Michael Grant, Department of Pharmacology, "Variability of Caffeine Biotransformation in Man." Prof. W. Kalow and B.K. Tang.

Imtiaz Moosa, Department of Philosophy, "Scheler's Philosophy of Value and Ethics in Relation to Kant's Ethics." Prof. J.C. Morrison.

Gregory Myles Stott, Department of Geography, "A Structural Analysis of the Central Part of the Archean Shebandowan Greenstone Belt and a Crescent-Shaped Granitoid Pluton, Northwestern Ontario." Prof. W.M. Schwerdtner.

**Wednesday, January 29**  
Michael Brandl, Department of Chemistry, "Structural Effects on Reaction Rates: Decarboxylation and Amide Hydrolysis." Prof. R.H. Kluger.

Leslie Jane Bryant, Department of Education, "Appraisal Processes and Coping Strategies: A Comparison of Depressed and Non-Depressed Subjects." Prof. C. Christensen.

Sandra Ann Collins, Department of Pharmacology, "Phosphorylation of Na/K-ATPase by Muscarinic Stimulation in Exocrine Tissue." Prof. A.K. Sen.

**Thursday, January 30**  
Laura Agnes Hunt Billard, Department of Chemistry, "Laser Induced Electron Transfer of Solvated Electrons in Liquid Alcohols." Prof. G.A. Kenney-Wallace.

Horacio Walker Larrain, Department of Education, "The Transformation of Practices in Grass-Roots Organizations: A Study in Chile." Prof. E. Sullivan.

Jacobs Albertus Pretorius, Department of Electrical Engineering, "Design of Domino CMOS Logic for VLSI Applications." Prof. C.A.T. Salama.

Sylvia Soderlund, Centre for Comparative Literature, "Novel Territory: The Metamorphosis of Fiction in Canada and Quebec, 1965-1975." Prof. P.W. Nesselroth.

Shiyuan Yu, Department of Forestry, "Production of Butanol, Ethanol and Vanillin from Spent Sulphite Liquor." Prof. M. Wayman and D.N. Roy.

**Friday, January 31**  
Ellen Anderson, Department of Spanish & Portuguese, "Role-Playing and Role-Change as a Means of Self-Discovery in Selected Works of Cervantes." Prof. G.L. Stage.

Elizabeth Mary Harlow, Department of Philosophy, "The Agent Standpoint and the Limits of Compatibilism." Prof. M.T. Thornton.

Anne McKeough, Department of Education, "Developmental Stages in the Narrative Compositions of School Aged Children." Prof. R. Case.

Mirella Pasquarelli, Department of Italian Studies, "La formazione storica del perfetto forte nell'Italia meridionale." Prof. G.P. Clivio.

**Monday, February 3**  
Margaret Isabella Fitch, Institute of Medical Science, "The Construction and Reliability Evaluation of a Questionnaire Designed to Predict Psychosocial Distress in Newly Diagnosed Cancer Patients." Prof. D. Osoha.

## More January Specials

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the first option to be the one preferred by the membership, according to a June 1985 survey, but wanted "confirmation of this interpretation".

The June survey found that 83 percent of 1,011 respondents desired "more bargaining power" in their relations with the administration.

"My sense is that there is a real agreement that we need a more effective process for negotiating salaries, benefits and working conditions, and that this is a reasonable approach," said Askew in an interview.

Askew said he felt the series of lunch hour information sessions held this month at all three campuses were "supportive", particularly of the inclusion of staff policies as negotiable items. Several policy-related issues were raised in connection with this, said Askew, such as workload increases and early retirement.

Objections were voiced, however, over the mandatory dues clause, while other members wanted to know how the administration viewed the prospect of a memorandum. One member objected strongly to UTSA's methods in developing the draft memorandum, claiming members were not sufficiently advised or consulted.

Although UTSA has not "worked out the exact mechanism", the memorandum will likely be delivered to the chairman of Governing Council if it is ratified by the UTSA membership at a general meeting planned for Feb. 13, Askew said.

"We would say we want to enter into negotiations to establish an agreement between the staff association and

Governing Council," Askew explained, "and leave it up to the chair to decide how Governing Council would handle it."

Director of Personnel Eleanor DeWolf, while reluctant to comment "formally" on the draft memorandum before UTSA submits it, is critical of what she regards as the association's failure to advance other possibilities to its membership. "The option of improving the existing arrangement," she said, "is not one they have presented to their members."

Askew said that three respondents indicated on their forms that a "none of the above" option should have been available. "But our point of view is that the decision to do something was made earlier, in the June questionnaire, in which 83 percent were in favour of some sort of agreement."

"Now we are talking about what sort of agreement, we are not re-opening the question once again of whether we are going to do something or not."

DeWolf also argued that the small response to the questionnaire did not signify broad support of the memorandum. "One has a little difficulty in gauging the mandate UTSA seems to feel they have," she commented, adding that she felt it was "entirely possible" that the questionnaire response might disguise a majority of staff members who see no need for a memorandum of agreement.

"Now, again, one can't be very categorical about that (constituency) either," she continued. "All one can say is that there are a lot of question marks — around the strength of the feeling in favour of a memorandum as a solution, and around the number of employees who might think that the flexibility of the existing arrangement is something that conceivably could work very well."

Askew said he did not expect a high response to the questionnaire because it represented "fine tuning" of the June survey, which received over 1,000 responses. He also contended that the response should be interpreted as a vote of confidence in the UTSA position.

"I think if the memorandum had been more controversial, the response would have shown this. So I take it (the low response) as signifying general satisfaction with the approach we are taking."

DeWolf, however, maintains that modification of the current yearly bargaining system through the Liaison Committee (a joint UTSA-administration body) is the wisest course.

"We are trying to make our relations with UTSA in the Liaison Committee work well," she said. "I am just now trying to put the finishing touches on an outline of the revision of the personnel policy manual. All of the outstanding policy items from UTSA's negotiations last year are slated for review and consideration."

"There is no question in my mind that the existing relationship can work a heck of a lot better than it was working a year or a year and a half ago."

## In Memoriam

Edward Perry Gulien, manager of the utilities and equipment section, Physical Plant Department, Dec. 22.

Gulien was born in Saskatchewan in 1921 and was educated at the University of Saskatchewan, earning a BSc in mechanical engineering. He joined U of T in 1968. During his years with the University, he initiated a computerized central environmental con-

trol and monitoring system that received wide recognition within university communities. In September 1978, he received a certificate of recognition from Local 796, International Union of Operating Engineers, for his contribution to the training program for operating engineers established at the University.

As manager of utilities and equipment in physical plant

he ran a smooth and efficient operation. He was knowledgeable about the affairs of physical plant and showed a keen interest in the welfare of the University. This earned him the respect of his colleagues and staff to whom he was loyal and devoted. He will be missed not only for his professional abilities but also for his good humour and quick wit.

Wilbur R. Franks, OBE, CD, BA, MA, MD, professor emeritus, Banting & Best Department of Medical Research, Jan. 4.

Dr. Franks, inventor of the Franks Flying Suit, which permitted World War II pilots to avoid blackout during high-G manoeuvres, was born in Weston in 1901, completing his BA at U of T in 1924, his MA in 1925 and medical degree in 1928.

Thereafter, he joined the Banting & Best Department of Medical Research, where he worked in cancer research with Banting. Although Franks had joined Banting in his research on behalf of the war effort, his Flying Suit was inspired by routine laboratory work on cancer.

While attempting to purify what he hoped would be a vaccine against certain forms of the disease, Dr. Franks found that a test tube that broke at very high speed in a centrifuge would stay intact if floated in a larger test tube containing water. The Franks Flying Suit similarly cushioned the pilot with thin layers of water held between layers of a rubber suit.

Dr. Franks was also the originator of the concept behind the Toronto Centri-

fuge, the first Allied machine to duplicate the high-G forces the Franks Flying Suit was designed to counteract. Both the centrifuge and the suit served as prototypes for NASA at the beginning of the American space program.

Dr. Franks led a busy professional life. He worked at five different British military institutes while holding the position of Director of Aviation Medical Research for the RCAF overseas, and this merely during 1941-43. After the war he returned to Banting and Best, picking up his cancer research and remaining a world leader in

aviation medicine. Nor were his interests confined to medicine. In the mid-1970s he was part of the team that developed the Universal Language of Air and Space Operations, known as UNIGEN, which is being explored as a solution to the tower-of-Babel problems that still rise internationally among air traffic controllers.

In June 1984 Dr. Franks added to his many other honours the Canadian Aeronautics & Space Institute's McCurdy Award, for "outstanding achievement in art, science, and engineering relating to aeronautics and space."

## Arts and science council by-election

Nominations open today for positions on the general committee and other committees of the Faculty of Arts & Science Council.

Nomination forms and a list of vacancies are available at the faculty office, room 1006, Sidney Smith Hall, and the registrars', departmental, APUS and ASSU offices. Completed forms must be received in the faculty office no later than 4 p.m., on January 31 in order to be valid.

## Steacie fellowship to Nathan Isgur

Professor of physics Nathan Isgur, 38, was one of four scientists awarded E.W.R. Steacie Memorial Fellowships by science minister Frank Oberle last week in Ottawa. The fellowships, administered by the Natural Sciences & Engineering Research Council (NSERC), free the recipients to engage in research full-time for two years.

Isgur, educated at the California Institute of Technology and U of T, is a specialist in elementary particle physics, particularly models of subatomic particles. The work of his U of T team on "colour charge" dynamics — the ways quarks interact to create the "strong force" holding the nucleus together — established what is now widely regarded as the standard quantitative model of quark structure. This model has significantly influenced the current view of the fundamental nature of matter.

Isgur plans to use the two years to develop the model as a means of explaining the interaction of protons and neutrons, which are made of quarks. This will involve an investigation of gluons, the as-yet unobserved particles, fundamentally different from conventional matter, that are thought to link protons and neutrons.

## Public Forum

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# Committee Highlights

## The Academic Affairs Committee — Dec. 12, 1985

- the appointment of the dean of the faculty of education as acting dean was deferred until the January meeting (see story below)
- discussed problems in the architecture program (see story page 5). The vice-provost (professional faculties) said difficulties were symptoms of a lack of continuity in leadership, compounded by reductions in resources. The search process would begin again early in 1986 for a new dean and the administration had complete faith in the acting dean
- concurred with the recommendation of planning and resources that the tuition fee schedule for 1986-87 be approved
- a member objected to the use of the title "Chair" in reports of the committee, commenting that the word designated a piece of furniture. He thought a more appropriate title should be found
- the chair noted that the minister of finance had been invited to meet with members of the committee to discuss the funding of NSERC, SSHRC and the MRC. He had not yet received a formal response, but believed there was a good chance the meeting would take place

## The Planning & Resources Committee — Dec. 16, 1985

- recommended approval of the University's capital requests list for 1986-87. The assistant vice-president (planning) noted that any projects that are eligible for funding under the Excellence Fund would be withdrawn from the list, advancing projects with lower priorities. A member suggested that number 19 on the list, the project to renovate the basement of Simcoe Hall to serviceable space, and in turn relocate administrative units from library space, which is estimated will cost \$600,000, is an unnecessary expense, when there were academic departments in need of funds to offset the effects of high enrolments. The assistant vice-president (planning) explained the difference between the capital and operating budgets, noting that even if the project did not go ahead, the funds could not be spent to alleviate problems in academic departments. He said the renovation was a means to an end — the freeing up of space in Roberts Library which could be used for library purposes. It was less expensive to renovate the basement of Simcoe Hall, move the administrative staff from the library into Simcoe Hall and give the freed space to the library than it was to build new library space. The renovation would not give more space to the administration
- recommended approval of a reduction in the space program of the Natural Resources Centre to 166,680 net assignable sq. ft. and a project budget of \$46.1 million. The reduction in space reduces the number of academic units in the centre to three — botany, geology and forestry (Bulletin Dec. 16)
- the vice-president (research) discussed the draft proposal to purchase a supercomputer and questions were

asked about the management of the facility and the financial arrangements for purchasing and operating the supercomputer (Bulletin Dec. 16)

**The Business Affairs Committee — Dec. 18, 1985**

- approved authority to carry out the Natural Resources Centre project, at a cost not to exceed \$46.1 million, subject to approval of the revised plans by Governing Council and receipt of adequate funding as follows: MCU (\$30 million), Update (\$5 million), private funding (\$7 million), and additional contributions from the above (\$4.1 million). In response to questions from members, the committee was told that parking spaces lost from the site of the centre would be replaced by finding spaces in existing areas; consultants had been engaged who had reached the conclusion that six-metre-high stacks were required to disperse the fumes, the fumes would cause no environmental problems, and to minimize the aesthetic impact of the stacks, they would be aligned symmetrically; the Huron Street facade would be enhanced by trees, a prominent stair tower, the entrance to the Bancroft Street walkway and a large bay window, as well as building materials and large windows; a 2.7 per cent contingency factor was provided in the budget, yielding a 50 per cent probability of completing the project on budget. The vice-president (business affairs) said the administration, in its efforts to reduce the costs of the project, thought it preferable to be only 50 per-

cent certain than to make further reductions in the facilities. The additional cost of achieving an 80 per cent probability of completion on budget would be \$750,000. He added that the University would seek an additional \$2.1 million from MCU for inflation; if the ministry did not provide the additional support, unrestricted funds for the Update campaign might be used or a higher target might be set for future fundraising

- received for information the draft proposal for acquisition of a supercomputer. The proposal would be refined following discussion at the committee and further work. Among the points raised by the vice-president (research) in his presentation were: researchers had been working since 1984 to establish the case for the acquisition of a supercomputer and to identify the appropriate technology; a supercomputer was essential to keep U of T researchers in the front rank internationally; such a facility was being used in many areas of investigation and the range of scientific activity would grow; industrial uses were growing rapidly, with several firms indicating strong interest in a U of T facility; the proposal provides for a world-class facility; it would be a separate cost centre,

recovering capital and operating costs through grants and sale of machine time; the provincial government's contribution would be recognized through access to investigators at all Ontario universities; an advisory board would recommend policy, time allocation and development plans; the facility would be managed by UTCS; the projected costs were \$11 million for the supercomputer, between \$400,000 and \$900,000 for installation, and operating costs, aside from amortization, of \$1.5 million a year; \$10 million would be received from the provincial government if the application were successful; the proposal would be discussed widely in the University; the concerns raised by Prof. Luste in a memorandum to the committee would be answered satisfactorily, he believed.

In discussion, committee members raised a number of questions concerning the appropriateness of the CRAY X-MP/24; costs, income projections, UTCS management, amortization and benefits to the U of T community in relation to possible risk. In response, they were told that while bigger and faster machines were being developed they did not now exist and the proposed acquisition would be a useful machine for many

years; new and allocated costs would be shown separately in the final proposal; the final proposal would include both the costs of using UTCS services and establishing a supercomputer facility with separate direction, staff and location; the amortization period had not been firmly established; and that the University would be required to share time with other universities only during a period of time deemed suitable to compensate for the provincial contribution. Once the facility had been paid for, ownership would reside with the University and the requirement to provide time to other provincial universities would end. Because the improvements and updating of the facility would be achieved through the sale of commercial time, the University would have a full claim to the enhanced facility. Also, it was possible that the province would wish to continue contributions to ensure continued access by other universities

**The Planning & Resources Committee — Jan. 6, 1986**

- recommended for approval the budget guidelines for 1986-87 (see story, page 1)

## MacDonald to be FEUT acting dean

The Academic Affairs Committee has approved the appointment of John MacDonald, the current dean of the Faculty of Education (FEUT), as acting dean from July 1, 1986 to June 30, 1987 or until a new dean is appointed, whichever comes first.

The appointment was made over the objections of some members of the faculty, who fear that an acting dean may not be in a strong enough position to protect their interests as negotiations continue with the Ontario Institute for Studies in Education for a

transfer or merger. The Haist rules require that a search committee be set up before a dean's term can be extended.

FEUT's council had asked at the December meeting of academic affairs that the motion be deferred for a month.

Extension of OISE's affiliation agreement with the University of Toronto, under which U of T degrees are granted to OISE graduates, was approved at the meeting for one year, until June 30, 1987.



## VICTORIA COLLEGE in the University of Toronto

invites applications for the position of

## PRINCIPAL

Victoria College is the arts and science college of Victoria University, one of the federated universities constituting the University of Toronto. The Principal is the chief academic officer of the college, reporting to the President of Victoria University and to the Board of Regents. A tenured teaching appointment in the University of Toronto is required for this position. The initial appointment will be for five years, commencing 1 July 1986.

To conform with Canadian immigration requirements and the Victoria University Act, this advertisement is directed to Canadian citizens only.

Interested applicants are invited to write by February 14 to:

The Chairman,  
Search Committee,  
c/o Office of the President,  
Victoria University,  
73 Queen's Park Crescent,  
Toronto M5S 1K7

Notice of the following vacancies outside the University have been received by the Office of the President.

**University of Illinois at Urbana-Champaign**  
Vice-Chancellor for Research and Dean of the Graduate College  
Position available Aug. 21, 1986  
Deadline for applications and nominations: February 28, 1986

Contact: Professor R.L. Switzer, chairperson, Search Committee to Nominate Candidates for Vice-Chancellor for Research and Dean of the Graduate College, c/o Office of the Chancellor, University of Illinois at Urbana-Champaign, Swanlund Administration Building, 601 East John St., Champaign, Illinois 61820 (217/244-0574)

Concordia University  
Vice-Rector, Services, five-

year appointment, position available June 1, 1986.  
Deadline for applications and nominations: January 31, 1986.

Contact: Dr. Patrick Kenniff, Rector and Vice-Chancellor, Concordia University, 1455 de Maisonneuve Blvd. West, Montreal, Que. H3G 1M8; or J.M.B. Beaupré, Price Waterhouse & Assoc., Designate File #25085.

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# Budget Guidelines for 1986-87

The budget of a university is in many respects the best single indication of its commitments and priorities as an institution. Although the University of Toronto has in recent years had virtually no flexibility to make major changes in the composition of its operating budget, each year's budget has been set with increasing attention to plans and priorities, and with great care for the future.

Given the basis on which the University is funded and the long-term character of many budgetary commitments, each operating budget, although expressed in annual terms, is in fact part of a larger pattern.

It is a complicated pattern involving assumptions about price inflation, enrolment, funding formulae, investment income, current rates of income and expenditure, rates of retirement and resignation, salaries and wages, and the costs of major services, especially utilities. The list of components that compose the budget equation could be longer, which would reveal further the complexity of the budget process and the uncertainties that are necessarily part of it at the time the Budget Guidelines are prepared each year.

The Budget Guidelines set the parameters of budget development. Of central importance in the Guidelines is a model or, sometimes a series of models, which determine the overall adjustments that must be made in the University's base operating budget for the forthcoming year and, to the greatest extent possible, for the two or three subsequent years. From year to year the Guidelines may also set special budgetary priorities, indicate the advisability of deficits and surpluses, outline funding and budgetary strategies, and determine levels of discretionary spending to support new initiatives.

The Guidelines are submitted to the Governing Council through the Planning and Resources Committee to indicate and seek approval of the framework in which the budget will be developed. Before the Guidelines are submitted, the framework for budget development and the principles on which it is based are discussed informally with the heads of major academic divisions to gain their advice and to ensure that the Guidelines represent shared objectives for the forthcoming budget.

The discussions that preceded the Guidelines for 1986-87 have emphasized the importance of maintaining and, where possible, enhancing the quality of the University's academic programs and services. When budget reductions are required, as they too often are in what now is a decade of chronic underfunding, they must be made in ways that will minimize their effect on academic programs.

One should take a moment here to note what the operating budget is not. Capital funds, trust funds, and restricted funds, particularly those which support grant and contract research, are not allocated through the operating budget. These various funds are considerable. In the case of research, they represent almost one half of annual spending. What is in the operating budget are the funds which support the basic functions of the University: our faculty, administrative staff, libraries, computer services, student services, physical plant, and the myriad of smaller programs and services on which the strength and vitality of the institution are founded.

## Budget Process for 1986-87

Despite occasional changes in organizational detail, the University of Toronto has consistently endeavoured

to establish and follow a comprehensive system for planning, evaluation and budgeting. Such a system must depend partly on quantitative analysis and partly on qualitative judgement. However the system is organized, it must be guided consistently by certain principles which in turn lead to the pursuit of clear objectives.

## Basic Policies and Principles

— The University, its Faculties, Schools and Colleges should have and be guided by reasonable plans. Divisional plans are a matter of official record through the Planning and Resources Committee of the Governing Council.

— Plans should be founded on the academic purposes of the University and its Faculties, Schools and Colleges.

— The University's budgets — both operating and capital — should be financial translations of institutional and divisional plans and priorities, and ultimately the academic purposes of the University at large.

— The effectiveness of the translation of plans and priorities into budget allocations to particular programs, services and activities should be evaluated periodically according to consistent criteria.

— Budgetary allocations, whether for increases or decreases, should be differential according to plans, priorities and evaluation.

## Objectives

— To ensure that the University's operating revenue is deployed in ways which best realize the University's objectives, approved plans and academic purposes.

— To ensure that academic and administrative units have the resources required to carry out their work effectively, subject to the constraints imposed by the flow of revenue.

— To provide an effective means of monitoring revenue and controlling expenditures, in conformity with the highest standards of financial management and accounting.

## Desirable Characteristics of the Budget Process

— The budget process should not make demands on the time of administrators which are unreasonable in relation to the importance of the issues.

— The concerns of divisional heads should receive proper consideration. The process should be fair and consistent.

— The Governing Council should have confidence in the process and should have an opportunity to review guidelines and major strategies at formative stages.

— The respective executive officers at the various levels should have responsibility for formulating proposals for budgetary allocations within Governing Council regulations and "Basic Policies and Principles for Strategic Planning, Evaluation and Budgeting".

— The budget should receive final approval at least several weeks before the beginning of the budget year.

— The budget model, once set and accepted, will be followed in budget development unless events force radical changes in the assumptions on which the model is based. If this course of action causes manageable deficits or surpluses, they will be dealt with in the next budget cycle. A manageable deficit is one for which there is a feasible plan by which it would be eliminated in a subsequent budget cycle.

## Income and Expenditure Projections, 1985-86 to 1991-92

The first step in developing a new operating budget is to project both in-

come and expense. Several factors bear on these projections. The principal factors are: the amount of provincial operating grants, the formula by which the grants will be distributed and tuition fees limited, enrolment in the University and in the provincial university system overall, income from sources other than grants and fees, and the costs of salaries, wages and benefits.

The projections begin with the current budget. As a result of the salary settlement for 1985-86, this year's budget began with a \$955,000 deficit. There is no prospect that the deficit will be reduced by the end of the budget year. Current estimates are that the actual results for 1985-86 could produce a deficit of as much as \$1.5 million, unless spending is deliberately depressed between now and the end of the budget year (April 30, 1986).

Income and expense are then projected on the assumptions that the University's staff complements will remain at current levels, and that the volume of purchases of goods and services — equipment, telephone, travel, utilities, building maintenance, library acquisitions, computing — will also remain at current levels. If the projection of income and the projection of expense do not produce equal amounts, the University must expect to face either a surplus or a deficit. Unfortunately, the projections indicate a deficit for 1986-87, and for at least 1987-88 as well.

One should observe at this point that even if a balanced budget or even a modest surplus was projected, the University still would be seriously underfunded by as much as ten percent (about \$38 million), which is the estimate of underfunding which the University prepared in 1984 for the Bovey Commission. The fact that the Commission's recommendations have not been acted on in no way negates the problems that they were aimed at correcting. Instead, the absence of action makes the problems all the more serious.

## Income

For the first time in many years the Budget Guidelines' projections of income are based on quite definite information about grant and fee income. The Minister of Colleges and Universities has announced that operating grants for 1986-87 and for 1987-88 will increase by four percent. Increases in tuition fees will also be limited to four percent. The University's Tuition Fee Schedule for 1986-87 was recommended for approval by the Planning and Resources Committee in November. Thus grant and fee income, which together constitute about 95 percent of the University's operating income, can be projected with considerable precision.

There are only two remaining variables that affect grant and fee income: the formula by which the grant is distributed, and enrolment. The Minister has asked the Ontario Council on University Affairs (OCUA) for advice about a new distributive formula. But the OCUA has already indicated that an entirely new formula cannot be introduced before 1987-88. The University has been invited to submit its own advice to the OCUA by March 1986.

For 1986-87 the OCUA will advise that the current arrangement should be continued, but possibly with one important change. The current formula is a combination of two formulas: the "old formula" which was in place until 1983-84 and the "new formula" which was partially introduced in 1984-85. The principal difference

between the two schemes is that the "new formula" is less sensitive to enrolment fluctuation and is therefore more advantageous to the University of Toronto than the "old formula".

The formula for 1985-86 is a combination of the "old formula" at two-thirds weight and the "new formula" at one-third. When the formula was introduced, the Ministry's plan was to move from the "old formula" to the "new formula" in thirds over a three year period: 1984-85, 1985-86, 1986-87. Thus the current composition should be one-third/two-thirds, but it is not because the transition from the "old formula" to the "new formula" was deferred in 1985-86 in the expectation that the Bovey Commission would recommend a new formula and the government would enact it. The Commission did its part.

Now that the Minister has announced that the Commission's proposal will not be enacted, and the OCUA has announced that its advice on a new formula will not be available in time for implementation in 1986-87, the question is whether or not the transition from the "old formula" to the "new formula" will recommence. If it does, the University of Toronto will gain about \$700,000. The projection of income and expense assumes that the transition will move to at least one-third/two-thirds in 1986-87, in which case the University of Toronto will receive about a 3.92 percent increase in operating grant income. If the transition is not resumed, the comparable figure will be 3.66 percent. Although this seems to be a reasonable assumption, neither the OCUA nor the Ministry has given any indication that the transition will be resumed. The University's income is affected by enrolment in three ways. The University's own enrolment determines income from tuition fees and is one factor in determining our grant income. Enrolment at other universities is the second factor. In both cases, enrolment is converted to funding units (BIUs and GFUs) to determine each university's share of the operating grant. The projection of income shows the University of Toronto's share of the operating grant holding steady at 21.75 percent.

Since the Government's operating grant is supplemented by differential tuition fees from most foreign students, the enrolment of foreign students affects grant income as well as tuition fee income. The number of foreign students in the province has been declining, thus reducing the "visa fee supplement" (which in 1985-86 is expected to be about \$112 for each BIU and GFU). The value projected for 1986-87 is \$98 based on the already announced increase in tuition fees and expectations about enrolment. The overall "visa fee supplement" pool for 1986-87 is projected at \$34.5 million.

A detailed enrolment plan for the University for 1986-87 will not be prepared until March or April, but the general strategy will be to set enrolment targets at the levels planned for 1985-86. That will probably remain the strategy until a new funding formula is introduced.

Interest income and "other general income" are difficult to project with precision. After elimination of a once-only interest income budget of \$715,000 for 1985-86, the basic assumptions are that interest rates for short-term investments will be at nine percent and that "other general income" will increase at a rate of approximately 4.4 percent.

The University of Toronto receives two grants from the Ministry other than the operating grant. There is a



supplementary grant for the Erindale-Sheridan fine art program, and a special grant for University of Toronto Schools (UTS). Both grants are projected to increase at four percent before adjustments to enrolment in the case of the fine art program.

Thus the sum of income from all sources is expected to increase by 3.2 percent, \$10.5 million. The increase, particularly in income from grants and fees, is seriously inadequate, but the estimates are nevertheless unusually reliable for this stage of the budget process.

### Expense

In comparison to the projections of income, the projections of expense are less definite, although equally distressing in several respects.

The costs of salaries, wages and benefits together constitute about 80 percent of the University's annual operating expenditure. Thus any assumption about those costs are extremely influential in the projections. For the sole purpose of projecting a budget model, as represented by the "Preliminary Budget Projections for 1986-87", a general assumption has been made that the costs of salaries, wages, and benefits will increase at a composite rate based on the assumed rate of inflation, plus the calculable costs of the continuation of the existing progress-through-the-ranks (PTR) and merit programs. One should emphasize that the assumption made for the purpose of projecting the cost of salaries, wages and benefits is neither reflection of University policy, nor is it an objective of budget strategy for 1986-87. Indeed, as the projections plainly indicate, it is an assumption that the University cannot afford.

Non-salary expenses are projected to increase at the rate of inflation, as of the end of 1986. Several sources have been consulted about the most likely pattern of price inflation over the next 12 months. The assumption is that prices will increase by about 3.5 percent by the end of the 1986 calendar year. The assumption involves an element of risk on two counts. The University's purchases of goods and services are often different from the "shopping basket" on which estimates of the Consumer Price Index are based. There is considerable variation among the estimates of the CPI to the end of 1986. The assumption - 3.5 percent - is well within the range of variation, but the range extends from below two percent to above four percent.

### The Net Result

The projections of income and expense combine to indicate a shortfall or potential deficit of \$6.2 million. To that amount one must also add the unbudgeted shortfall of \$955,000 in 1985-86, thus producing a total shortfall of \$7.2 million. If no action is taken to correct this shortfall, it will increase to at least \$14.4 million in 1987-88 and will continue without abatement until corrective action is taken. The longer corrective action is delayed, the less manageable the deficit will become. Indeed, even by 1987-88, the shortfall would exceed the Governing Council's allowable level of deficit at 1.5 percent of current operating income. Corrective action could be in the form of either increased revenue or reduced base budget expenses, or a combination of both. The likelihood of increased revenue above rates of inflation is, unfortunately, not great. For 1987-88 the Minister has already announced that operating grant income, presumably including tuition fees, will not increase by more than four percent.

On the expense side, a sharp decrease in the rate of inflation would produce some relief in 1987-88, since the Minister appears committed to a four percent increase in funding for that year. But there is no tangible

reason to expect that increases in funding after that will exceed increases in prices. In light of the extreme extent to which the University is already underfunded, there is no painless means by which programs or services can be reduced to produce savings in expense.

The budget projection for 1986-87 is realistic and objective. As unfortunate as a \$7.2 million shortfall in funding is, it is neither artificial nor avoidable.

### Budget Strategy

The budget strategy for 1986-87 has several elements, all of which are highly inter-dependent. These elements can be followed by reference to Table 1, which summarizes the sources and applications of funds for 1986-87.

**A Balanced Budget.** In light of the size of the accumulated deficit currently, and the prospect of future shortfalls of income over expense, the operating budget for 1986-87 must be balanced, including the unbudgeted cost of the 1985-86 salary settlements. To accept a budgeted deficit in the absence of a realistic capability to recover from it would be improvident indeed.

**New Income.** The budget projection already is somewhat optimistic in the sense that it assumes that the transition in the operating grant formula from the "old formula" to the "new formula" will continue. But there is no assurance that it will. The University has urged the OCUA to recommend resumption of the transition and its acceleration as well.

The program weight for the University's undergraduate Arts and Science programs has been recalculated to produce a small increase in BIU entitlement. Approval of the recalculation is being sought from the Ministry.

Tuition fees, which have already been recommended for approval by the Planning and Resources Committee, are at the maximum possible levels allowed by Ministry policy.

Enrolment will be maintained at the levels planned for 1985-86. Since actual enrolment for 1985-86 was below planned levels, this strategy will result in an increase in actual enrolment by about 500 FTE's.

Income from investments is already projected at a comparatively high level. For 1986-87 the projection indicates nine percent rate of return. It would be imprudent to assume a higher rate.

### Internal Reallocation

The 1985-86 budget contains, quite deliberately, about \$1.22 million in "one-time-only" expenditures. These are reversible. Because they are, they are in effect a source of funds that can be applied towards solving the budget shortfall. The "one-time-only" expenses in the 1985-86 budget will be reversed for 1986-87.

### University Excellence Fund

The Minister has announced a \$50 million University Excellence Fund for 1986-87. The Fund has three components: \$10 million for faculty renewal, \$15 million for research equipment, facilities and technical support, and \$25 million for library equipment and acquisitions, and instructional equipment. The University of Toronto will probably receive about \$11.8 million (about 24 percent) of the Fund: \$2.0 million for faculty renewal, \$4.7 million for research equipment, facilities and technical support, and \$5.1 million for libraries and instructional equipment.

Other than the possibility of continuation of the faculty renewal component of the Fund, it is a source of funds for 1986-87 only. Moreover, it is intended to supplement the operating grant, not supplant it. Thus the application of the University Excellence

Fund to the operating budget for 1986-87 is sharply limited. But there are some ways in which the Fund might be used to produce a sparing effect in the budget for 1986-87. These may involve the avoidance of costs that would have had to have been met by additions to the base budget. An example is the cost of maintaining the real value of the University's various library acquisitions budgets. The means of providing budgetary relief may also involve expenditures to produce future savings. Library automation and the re-equipping and consolidation of technical support services are examples of this approach to using the University Excellence Fund to relieve some of the pressure on the base budget.

If permitted by the terms of reference for the Excellence Fund, the strategy will be to use up to about 25 percent (about \$2.9 million) of the University's share of the Excellence Fund in this way. Because the Fund is available for 1986-87 only, the base budget reductions that the Fund makes possible may be temporary, and indeed probably will be to a considerable degree. For this reason, 25 percent is the maximum extent to which the Excellence Fund can be sensibly used to produce a sparing effect on the 1986-87 operating budget. Although one cannot be certain in the absence of specific terms of reference for the Fund, 25 percent also appears to be the equivalent of the sum of planned expenses that would be eligible for support from the Fund.

Indeed, 25 percent may be too high in any case if the Fund is relied on only in cases that can assuredly produce budget relief beyond 1986-87. On those terms, a more reliable figure in the absence of firm information about the Fund would be about one-half the maximum: 12 percent (about \$1.4 million). Even the lower figure is somewhat speculative since it is based on an assumption that the Fund could be used for the acquisition of computing equipment for which commitments to purchase have already been made, and for large-scale library automation.

### Additional Base Budget Reductions

Reductions totalling at least \$6.1 million will be sought from base budgets. If the University Excellence Fund can be used as proposed, up to \$2.9 million of the target can be met by avoiding additional costs of that amount and relying on the Fund for support that otherwise would have had to be added to the base budget. But an unavoidable fact must be underscored here. However the University Excellence Fund is used, the base budget reduction will still have to amount to \$6.1 million.

On the assumption that \$2.9 million in cost avoidance can be realized from uses of the University Excellence Fund, a further reduction of \$3.2 million will be sought differentially across the following budget "envelopes".

Of the \$3.2 million, about \$700,000, will be removed from the base budgets of the Offices of the President; Vice-President, Business Affairs; Vice-President, Research; Vice-President, Institutional Relations; and Assistant Vice-President, (Planning) and University Registrar. A reduction of that magnitude will amount to an average decrease of about 1.5 percent. A special effort will be made to protect the budgets of the Vice-President, Institutional Relations in order to provide the flexibility that will be needed to support the major fund-raising campaign that will begin in 1986-87. The protection, if possible, will be found by increasing the reductions assigned to the other administrative budgets. The budgets of the Vice-President and Provost will be unaffected by it.

The balance of the \$3.2 million, about \$2.5 million, will be removed from the base budgets for which the Vice-President and Provost has responsibility. Although a larger reduction in terms of dollars, the reduction assigned to these budgets will be on average about one percent, which is about two-thirds of the percentage reduction that will be assigned to the administrative budgets.

The difference between reductions is deliberate. An objective is to relieve the pressure on academic budgets as much as possible. Another objective is to assign the University's share of the University Excellence Fund almost exclusively to the budgets for which the Vice-President and Provost has responsibility. Exceptions to this objective might be support for computing (which is the responsibility of the Vice-President, Research) and the Media Centre (which is the responsibility of the Assistant Vice-President, Planning and University Registrar).

One must emphasize that if the University Excellence Fund can be used in this way, the actual base budget reduction in the budgets for which the Vice-President and Provost is responsible will be higher than \$2.5 million. If all of the \$2.9 million is assigned to those budgets, the total reduction will be about \$5.4 million. If any of the \$2.9 million in Excellence Fund support is assigned to other areas, the base budget reductions assigned to those areas will not be decreased, thus the reduction assigned to academic budgets will hold at the assigned \$2.5 million.

Three notes of caution must be immediately emphasized in regard to these reductions. They are targets. Much careful and difficult planning will have to be done to ensure their realization. The probability that these reductions cannot be made is much greater than the probability that they can be made.

The second note of emphasis is that the targets apply only at the level of the six envelopes. The senior administrator responsible for each envelope may and indeed should allocate the overall target for reduction differentially across the divisions within the

	Base budget*	% of total base budget
i. President	\$ 1.9 million	0.7
ii. Vice-President and Provost	245.8 million	82.0
This envelope includes all academic divisions, the library, and student services, as well as the Office of the Provost.		
iii. Vice-President, Business Affairs	36.2 million	12.2
iv. Vice-President, Research	5.6 million	1.9
This envelope includes UTCS.		
v. Assistant Vice-President (Planning) and University Registrar	4.8 million	1.6
This envelope includes the registrarial services (Admissions, Awards, I.S.S., and Media Centre).		
vi. Vice-President, Institutional Relations	2.5 million	9

\* The base budget, less obligatory and protected expenses.



# A Future for Women at the University of Toronto

## Report of the Ad Hoc Committee on the Status of Women

The Ad Hoc Committee on the Status of Women was formed in the spring of 1984 to speak on behalf of women in all constituencies of the University of Toronto. In 1984 it presented briefs from each constituency to Acting President Strangway, recommending the appointment of a Status of Women Officer. In 1985 the Committee has been preparing this Report, doing the background research including interviews and consultations with members of University constituencies and with knowledgeable people at other universities and colleges. The present Report formally identifies the problems that should be addressed and makes recommendations for change.

Although the University of Toronto teaches the greatest number of women students and employs the greatest number of women staff and faculty in an Ontario university, its record with respect to their status has been far from remarkable. A number of positive initiatives were taken last year, the year of the centenary of women's admission. Nevertheless the problems go deep and much remains to be done.

### 1. PREAMBLE

The University of Toronto, like many other universities and institutions, sustains a deeply embedded male dominance in its normal working processes. The roles of women and men represent the traditional division of labour whereby men had careers and women had more transitory roles in the paid workforce. The traditional rights of men to appropriate the work of their wives in the home was transferred to the work of women as secretaries, as administrators and even as junior scientists. The pursuit of career was the proper business of men. The University was organized on this basis, supporting and facilitating that enterprise. Women were employed in work not relevant to career advancement. Women students followed courses of study which assumed for most that while they might be employed outside the home, they would not have a career; or, if they had a career (in a field such as nursing) that it would be in subordination to men.

Issues for women in the university are generally conceived in terms of discrimination. We think of biases entering in at points where crucial career judgments are made, when people are hired, or let go, or promoted, or given tenure, or admitted to study in a given field at a given level, or awarded scholarships. The notion of discrimination assumes that women and men stand in essentially the same relation to opportunities in the university. It assumes that the university is essentially gender-neutral and that the apparent inequalities of women and men are the effects of bias. Eliminate it and inequality will be rectified. But the matter goes deeper than that.

The problem is more than a matter of attitudes. The gender organization of the university is part of the way it gets its business done. Some things have been changed and some earlier practices have been modified. But much remains. The gender organization of the university is not limited to effects on opportunities for advancement but is part of our daily working relationships.

In what follows, the *Ad Hoc Committee* has identified many of the aspects of university life which must be remade to create a university which truly lives up to its claims to universality so far as gender is concerned. These are familiar. We have looked at the role the University plays in an educational process that prepares women and men for the future parts they will play in society; we have looked at the university as a workplace; and we have looked at the university as a place of learning and the development of knowledge and culture. In all these respects, the University has been active in perpetuating inequalities between women and men.

In identifying specific issues we have drawn on the work of status of women committees at other universities in Canada (see Appendix A), on Government Affirmative Action Programs (see reference section on Staff), as well as on the experiences of many we have consulted at the University of Toronto. There are three major problems:

1. The survival in the institutions and professions of a male monopoly of scholarly, scientific and cultural life. This is perpetuated in the language of the university, in its curriculum, and in the ways in which women participate in the intellectual life and work of the university.
2. The organization of courses of study and occupational advancement treats the male life cycle as the norm. No account is taken of the fact that women's child-bearing period coincides with the period of study or professional work which establishes her professionally. The possibility that in the future a greater part in the work of childrearing will be played by men does not remove the importance of taking parenting responsibilities and their present gender-differentiated allocation into account.
3. The survival of the traditional division of labour confining women to jobs with relatively limited opportunities for advancement.

### 2. UNIVERSITY-WIDE ISSUES

Many of the changes needed to create equality for women in the University are specific to one of its three constituencies. There are some, however, which must be addressed at the level of the institution as a whole.

#### 2.1 Sexist Biases and Practices Demeaning Women

Sexist biases and practices demeaning women persist. We can read the continuing sexist humour of the *Toke Oke*. An entertainment for students, staff and faculty in a social science department recently was marred by "humour" degrading women. Naked women were pictured weighing their breasts and graphs of data were presented in the shape of a female breast. In orientation week last term, engineering students displayed a blow-up life-sized doll with a phallic dildo between her legs. A professor lectures on Aristotle's views on women and follows with a joke for A-level students "...but we all know one thing women are good for..." Such incidents display sexism as a normal and acceptable feature of university discourse.

We endorse the position of the Coalition for Unbiased Language calling for an official policy statement of the University of Toronto to end sexist and racist language in lectures, textbooks, printed material on campus, as well as in all University office correspondence.

A. RECOMMENDATION: The University should establish a code defining sexist and racist demeaning jokes, remarks, etc. as unacceptable in University contexts and publications. The code should be widely publicized. It should be supported by a program of workshops for administrators, Directors, Principals, Deans and Chairpersons.

#### 2.2 Male Biases in the Language of Official University Business

There is a persistent use of a masculine language which claims to be gender-neutral. Although improvements have been made in the official publications of the University to recognize that women as well as men are students, faculty and the administrative staff, much remains to be done. In our view, the University has a special responsibility to give leadership in this area. There are ample sources of models for appropriate changes in nomenclature, pronominal uses, etc. (for example, the Ontario Women's Directorate's "Words that make women disappear").

B. RECOMMENDATION: A committee should be set up to develop guidelines for non-sexist language in the conduct of University business and in university publications, official pronouncements and official letters.

#### 2.3 Childcare Facilities

Women still assume the major responsibility for childcare, and the absence of adequate childcare facilities represents a particular impediment to their university work, whether as students, faculty or staff. The University's failure to support childcare adequately reinforces the disadvantages women experience. Childcare facilities are also, however, important to the increasing number of men who are sharing parenting responsibilities with their wives or partners.

Childcare facilities on campus are inadequate to meet the needs of faculty, staff and students. There are staff members who do not earn enough to afford the fees. There are no facilities for children under two-and-a-half. There is no evening childcare enabling students with small children to attend evening classes or use the library in the evening or facilitating the evening work of faculty or staff. There is no short-term childcare in key areas such as the library where children can be left while parents pick up materials in the stacks, return books, etc.

C. RECOMMENDATION: The University should undertake responsibility for providing childcare facilities, including care for children under two-and-a-half, and should subsidize staff and students whose income is insufficient to afford the fees. Childcare facilities should be available in the evenings as well as during the day, and drop-in care provided at the library.

We applaud the investigation of day care needs on campus recently undertaken by a committee on day care policy set up to advise the Vice-President (Business Affairs). We note, however, that (as reported in the Bulletin of October 7th, 1985) the survey undertaken addresses faculty and staff only and does not address the needs of students. We understand, however, that the Status of Women Officer has taken up this problem and a mechanism is being devised enabling students to be consulted.

#### 2.4 Sexual Harassment, Security, The Women's Centre

There are three University-wide issues which are currently the focus of organized pressure and debate. We endorse these strongly, but do not comment on them at length since they are amply discussed elsewhere.

1. The first of these is the issue of sexual harassment. The University's Working Group on this issue has now completed its work and has submitted a Report to the Provost. We endorse the draft policy and look for its early approval.
2. A committee is currently investigating the problem of security on campus. This is of special importance to women working in the evenings and at night.
3. Finally, the Coalition for a Women's Centre has made important advances towards the establishment of a Women's Centre and space has now been made available.

#### 2.5 Monitoring change

The changes which the University must make to become a truly equitable institution are difficult and painful. They involve the rectification of its public existence and its everyday working practices. Overall change requires many changes in many sites, and the total picture needs periodic review.

D. RECOMMENDATION: The University should institute a periodic review of its overall progress, collecting whatever quantitative data would be needed to monitor the gender status of the university and reporting back to the Governing Council and the members of the University at large every three years. Responsibility for the review should be lodged with the Status of Women Officer.

### 3. THE CONCERNS OF STUDENTS

We have considered the issues for women students under three main aspects: those relevant to the part the University plays in structuring the career process and hence in reproducing the traditional gender division of labour in paid employment; the importance of recognizing the ways in which women's family commitments may impede a university career; and concerns with gender inequalities in the educational practices of the University.

#### 3.1 The Career Process

Women's participation in post-secondary education and the paid labour force has more than doubled in the last forty years (Armstrong and Armstrong, 1978). Yet women's educational gains are not reflected in the occupational structure of the



labour force. Seventy per cent of the female labour force is employed in the area of sales, service and clerical work. The educational system, from elementary school through university, perpetuates the segregation and ghettoization of women in the labour force by streaming women into traditional areas. Women are thereby denied equal access to the scarce resources of power, pay, respect, and prestige as well as opportunities for the creative realization of their abilities. Changes in the role of the University include changes which are treated under other sections of this report. The provision of childcare is of vital significance in removing the disabilities many women students experience in pursuing their studies. Increases in the proportions of women in tenure-stream faculty and senior administrative positions provide women with role models as well as sources of support. The discussion and recommendations in this section address inequalities specific to the careers of women university students.

### 3.1.1 Recruitment to Non-Traditional Areas of Study

The University is the final stage of a process which is begun in the school system. Hence it inherits the results of gender differentiation already completed in the schooling process. However, the University is highly influential in shaping the course of studies in high schools and should exert its leadership in actively seeking to reshape the distribution of women and men entering non-traditional fields from the secondary school level.

A. RECOMMENDATION: The University should develop an active program of recruiting young women to non-traditional programs, creating new recruitment materials (as has been done by the University of Waterloo for the field of engineering), establishing positions with specific responsibilities for liaison with high schools, and sponsoring career workshops in secondary schools to make young women aware of career options and their academic requirements.

### 3.1.2 Graduate School

The careers of students within the University from undergraduate to graduate status should be scrutinized. Is admission to graduate school equitably distributed between women and men? Are there processes discriminating against women such as those informal practices which weight men's achievements more favourably than those of women? Is there an equitable distribution of financial aid?

In the context of differentials in financial aid, it should be noted that existing differentials between Arts and Humanities and Physical and Life Sciences have major implications for women. Financial aid for students (fellowships, scholarships, research and teaching assistant funds) is more abundant in the Sciences than the Arts. Women's relative over-representation in the Arts and Humanities and their under-representation in the Physical and Life Sciences is therefore consequential for women's access to financial aid.

B. RECOMMENDATION: The University should institute and publish a study of the gender distribution of admission to graduate studies, access to funding, etc. including the effects of the unequal distribution of financial aid to Arts and Humanities and the Sciences, and develop a policy for the rectification of inequities.

If women have children during their graduate careers, they can experience loss of financial support. CUEW has made some progress on the issue of parental leave. Women graduate students interrupting their studies because of the birth of a child can extend their terminal date for the completion of their degree, but students on parental leave cannot defer University of Toronto fellowships.

C. RECOMMENDATION: The University should allow women graduate students interrupting their studies because of childbirth to defer their University of Toronto fellowships.

There is no recognition that the advent of a child dramatically increases the workload of women at home, making it hard for a graduate woman student with a child to resume her studies on the same basis as before.

D. RECOMMENDATION: The University should institute a part-time Ph.D. status.

### 3.1.3 Placement

Women graduates of the University confront a labour force in which there are marked differences in opportunities for women and men. Women are particularly likely to experience difficulties in securing employment in non-traditional areas.

E. RECOMMENDATION: The University should seek the advice of the Ontario Women's Directorate in devising means of extending its affirmative action policies into the placement process. In the meantime, these steps should be taken:

1. The University of Toronto should permit only 'equal opportunity' employers to recruit on campus.
2. Faculty members should be alerted to the employment needs of women students when hiring teaching or research assistants and be encouraged to recommend women as well as men for positions.

## 3.2 The Interrupted Educational Career

Women's responsibilities for childcare and unpaid work at home as well as their lack of financial independence and their relatively low earning capacities create impediments to university education which do not exist in the same way for men. The University system supports existing inequalities between women and men merely by assuming that the conditions normally present for men are present for women. One important aspect of this is the provision of adequate and low-cost childcare facilities on the University campus (see 2.3 above). Others involve expansion of existing services.

### 3.2.1 Recruitment of Mature Women

In the past, the constraints on women's career choices were even greater than today. Older generations were less likely than younger to enter the work force or embark on career training paths. The University should undertake a particular responsibility to mature women who were unable at an earlier stage in their lives to develop their intellectual talents.

The Transitional Year Program, Woodsworth College and the School of Continuing Studies already provide opportunities for mature women. Their capacities to serve mature women should be strengthened and expanded.

F. RECOMMENDATION: Woodsworth College and the School of Continuing Studies should actively expand their services for mature women. These should include the following:

1. An active campaign to attract them to university-level work, with special emphasis on non-traditional fields.
2. The provision of special orientation and counselling to assist in their adjustment.
3. With the advice of the Ontario Government's Women's Directorate, the development of programs bridging university training and career opportunities for mature women.

### 3.2.2 Degree Programs for Women in their Homes

Lack of childcare, inability to leave their homes, and lack of independent financial support bar the entry of many women to university-level education. The Open University in Britain has been particularly successful in providing university education to women in their homes.

G. RECOMMENDATION: The University should reconsider their present policies concerning 'distance education' and explore with the Provincial Government the development of a distance education program leading to bachelor's level degrees.

### 3.2.3 Career Interruptions and Their Bridging

Women are more likely than men to experience marriage and/or childbirth as interruptions in their educational career at the secondary school level. The Transitional Year program continues to be very important in providing an opportunity for women to bridge the gap between an interrupted education and university-level studies.

H. RECOMMENDATION: The Transitional Year program should be strengthened and expanded.

## 3.3 Classroom and Curriculum

### 3.3.1 Classroom Climate

In either blatant or subtle forms, sexism in the classroom is a serious problem. Thus far, the University has made no systematic attempt to eliminate it. As documented by Hall and Sandler (1982), this type of sexism can range from obviously preferential treatment of male students, sexist language and humour, the distribution of sexist materials, to more covert responses by faculty such as interrupting women students when they speak, acknowledging and calling on them less often than men. Similar practices have been thoroughly documented in studies in a variety of other contexts of male-female interaction. Sexism in the classroom impedes the development of the full personal and academic potential of women students. It creates unequal access to the educational situation.

I. RECOMMENDATION: Teaching guidelines on sexism in the classroom should be incorporated into the existing teaching guidelines prepared and distributed by the Provost.

J. RECOMMENDATION: An evaluation of sex bias in the classroom should be incorporated into teaching evaluations of all faculty and teaching assistants.

K. RECOMMENDATION: The University should set up a grievance procedure to deal with complaints relating to sexism in the classroom.

One of the problems of sexism in the classroom is that it involves practices which women and men take for granted. An important step in changing the situation is to improve people's awareness. The University should take active steps to make the teaching staff of the University aware of unconscious sexist practices.

L. RECOMMENDATION: The Provost in conjunction with the Women's Centre should develop a program to raise awareness of sexism in the classroom, including a well-publicized information campaign and workshops for faculty and teaching assistants.

### 3.3.2 Eliminating Gender Biases in the Curriculum

In the area of scholarly and scientific studies related to women, the University fails to provide adequate access to the developing knowledge and thinking. Current work of scholars and scientists is rectifying the almost total silence of the past. One indication of the subordinate position of women in the University is the extent to which academic concerns of particular relevance to women are marginalized in the curriculum and in the research priorities of the professorate. Some departments in which women's concerns might well occupy a major place offer no provisions for their study. While active interdisciplinary Women's Studies Programs do exist at New College and at Scarborough Campus, they operate at an inadequate level of funding and only at the undergraduate level.

An essential step to the full equality of women at the University of Toronto is to accord full status to Women's Studies by providing an institutional focus for teaching and research.

M. RECOMMENDATION: The University should establish an Interdisciplinary Centre for Women's Studies with teaching responsibilities at both the graduate and undergraduate level. The Centre would have the budgetary and institutional capacity to hire and cross-appoint faculty.

N. RECOMMENDATION: The University should ensure that Women's Studies courses are available on all of its three campuses.

At the same time, it is important to avoid confining Women's Studies to a single program or centre. Women's issues and concerns are integral to a wide range of faculties and departments and should be incorporated as a normal part of other studies. Such curriculum integration should also be an important objective. To this end, as well as to support the establishment of a Women's Studies Centre, the University needs to recruit more faculty specializing in women's studies in various areas.

O. RECOMMENDATION: The University of Toronto should allocate special funding to enable Departments to appoint scholars specializing in women's studies in their respective fields. Appointments would be made according to normal departmental procedures and standards, with the restriction that the major scholarly commitment of those appointed would focus on women.

These 'institutional appointments' should not be considered in any way as a substitute for the improvement of opportunities for women faculty.

It is important that interested faculty members should have opportunities and encouragement to become knowledgeable in thinking and research related to women in the fields of their specialization.

P. RECOMMENDATION: The University should establish a program of professional incentives enabling faculty members to undertake special studies in Women's Studies in their field of specialization.

## 3.4 Athletics

### 3.4.1 Varsity Athletics

Gender inequality in sport appears as differential access to scarce resources and differential evaluation and status. Men's sports (for example, hockey, football and basketball) are more highly valued in our society than sports in which women excel (for example, gymnastics, skating and field hockey). The Sopinka Report (1983) on equal opportunity in athletics concludes that there is discrimination against women in university programs. Equality of opportunity is denied to women athletes through the under-representation of women in athletics, unequal funding, unequal promotion of women's sports, discrimination against women in the allocation of athletic facilities, practice times and other services. Women contribute equally to finance athletic programs yet they receive unequal benefits. The unequal representation of women as coaches, instructors and administrators in athletics deprives women athletes of role models and support.

It is imperative that the University commit itself to equality of opportunity for women and men in sport. Gender equality in athletics cannot be realized unless



women are given equal opportunity and women's sports equal value with those of men.

Q. RECOMMENDATION: Women's athletic activities should be given funding and support equal to that available to men's. They should receive the same level of coaching, facilities, competitive opportunities, practice time, uniforms, equipment and travel allowances as men.

R. RECOMMENDATION: The University should establish a media policy with University newspapers, city newspapers and city television pressing for equal coverage of female and male sports competitions and athletes.

#### 3.4.2 Intramural and Recreational Athletics

The situation at the intramural and recreational level parallels the situation in Varsity sports. Women students contribute funds to athletic programs on the same basis as men, but they do not share equally in the use of the athletic facilities and opportunities these funds support.

S. RECOMMENDATION: Women's intramural and recreational sports should be given funding and support equal to that available to men.

These inequalities can be traced to socialization and societal attitudes. Women have not been encouraged to develop athletic skills and as a result cannot successfully compete in intramural sports or participate in recreational sports. A program is needed to encourage women to participate more fully in the development of their athletic abilities and interests.

T. RECOMMENDATION: The Athletics Department should develop a program to encourage women students to participate in athletic programs and should provide remedial programs to assist women in upgrading their athletic abilities.

#### 3.5 Student Counselling Services

The increasing breadth of academic and social choices promote difficult decisions for women of all ages and academic levels in today's university. Gender biases in the University and in the society also create special problems for women. Student counselling services should be capable of responding to the distinctive needs, situations and problems of women students.

U. RECOMMENDATION: The University should review the adequacy of its counselling services to meet the special needs of women students. The following measures should be considered in reorganizing its services:

1. A counselling centre should be established to provide academic, psychological and health counselling for women.
2. There should be sufficient women counsellors to meet the needs of women who prefer to consult women.
3. Professional development programs in non-sexist counselling should be established (for guidelines, see Pettifor, Larsen and Cammaert, 1984).
4. Information about the availability of counsellors should be provided in residences, student newspapers and the Women's Centre.

### 4. THE CONCERNS OF ADMINISTRATIVE STAFF

Women administrative staff confront problems arising from the established institutional organization and prevailing attitudes in the University. Discrimination and inequitable treatment are for the most part not conscious. Rather they arise from everyday practices which are embedded in established procedures. The University must initiate measures to break with these. Women are the majority of the administrative staff. They continue to be disproportionately employed in lower level positions and with lower salaries relative to men (see Appendix B). The range of positions accessible to them fails to make use of their abilities. Past and present personnel policies and practices have deprived them of the opportunity to realize their talents and potential.

These practices are not peculiar to the University of Toronto. In similar situations in government and the private sector, remedies have been sought by instituting affirmative action programs. The Ontario Women's Directorate of the Office of the Minister Responsible for Women's Issues and the Ministry of Labour's Women's Bureau have supported such programs with considerable success. It is time that the University of Toronto took action. It is important that definite objectives and timetables be set in the making of change (see Appendix C for models of such timetables).

A. RECOMMENDATION: An Affirmative Action program should be instituted with definite targets for recruitment, promotion, a definite timetable for achieving its objectives and a built-in monitoring system to assess its progress.

Change in this area requires the appointment of a person with appropriate qualifications and expertise to guide and manage the implementation of change. The specialized work and its extent could not be simply added to that of the present Status of Women Officer. A distinct position with special responsibilities and qualifications in this area is essential.

B. RECOMMENDATION: The University appoint a qualified Affirmative Action Officer with experience both within and outside the University to develop programs, procedures, objectives and implementation plans, and to guide the process of implementation.

#### 4.1 Recruitment, Selection and Opportunity for Advancement

A key point at which discrimination operates is through the system of promotions. Though administrative vacancies within the University must be advertised, in practice this does not ensure that women are aware of them. The official policy of giving preference to internal candidates is often given only lip-service and in practice well-qualified women are passed over. The system of recruitment and selection must be redesigned to ensure that internal vacancies are genuinely open to women.

C. RECOMMENDATION: The University should review and reorganize its procedures for filling internal vacancies as follows:

1. Qualified women should be actively sought out and encouraged to apply. To this end, a system of record-keeping should be established making it possible to locate the files of those qualified for a position, who could then be contacted and encouraged to apply.
2. Job descriptions should reflect the realities of the job and be free of gender-biased language.
3. "Bridging" positions should be created to provide experience for qualified women enabling them to advance to senior positions.
4. Women should be made aware of potential career paths and how best to prepare themselves for advancement; and positions into which they might move should be specifically targeted.
5. There should be an increase of resources applied to career development programs, particularly to "in-house" training, re-training and course work in the School of Continuing Studies. Information on available relevant career-development programs should be made widely available to administrative staff.
6. Internal candidates should be given clear preference and no resort made to external appointment until reasons for not hiring internally have been given in writing and reviewed by the Personnel Officer and the Affirmative Action Officer.

#### 4.2 Classification and Evaluation

The ways in which jobs are classified reinforces the assumptions of the traditional gender division of labour, opening career opportunities for men and locating women in dead-end or limited-opportunity positions (see our Preamble). A job classification system based on gender assumptions will, for example, describe the same work differently depending on whether it will be done by a man or a woman. When women come forward for promotion, they may find that previous work experience relevant to advancement has not been recorded in ways which make its relevance objectively visible. Or the series of steps within a set of positions which women are expected to fill creates a very different range of salaries and opportunities for advancement than a similar set to be filled by men. Problems such as these point to the need for a review of the job classification system.

D. RECOMMENDATION: The job classification system should be subject to scrutiny in terms of its reinforcement of gender biases and an alternative system should be developed to remedy this.

E. RECOMMENDATION: Job ladders, facilitating vertical and lateral movement, should be developed and published.

The system of evaluation is too discretionary and subjective, leaving it wide open to the effects of gender stereotypes and prejudices. We know from a variety of studies that women's qualifications and abilities tend to be discounted merely because they are women (see, for example, Goldberg, 1969; Smith, 1978). Many are not aware of these processes and practices which may therefore creep unconsciously into the making of judgments and decisions. It is important to develop more objective procedures or evaluations which are less subject to the individual discretion of managers.

F. RECOMMENDATION: The present subjective evaluation procedures should be abandoned and replaced with a system of objective evaluations, acceptable to administrative staff as represented by UTSA and to the Administration.

G. RECOMMENDATION: In conjunction with the Ontario Women's Directorate, the University should develop a program of professional development for managers and supervisors introducing them to non-sexist approaches to evaluation.

#### 4.3 Working Conditions

In general, administrative staff occupy the less favourable working space. Staff, most of whom are women and who work in the same location every day are often relegated to uncomfortable and unpleasant windowless areas, while managers, most of whom are men, may (because of cross-appointments) occupy two or three attractive offices.

H. RECOMMENDATION: The administration should rationalize the use and assignment of space to reflect the realities of people's work situation rather than hierarchy.

Technological changes in offices are now occurring very rapidly. These often have a major impact on women's work. Yet women staff are seldom consulted or considered prior to the installation of new technology. In addition to the impact on their work, failure to consult often means a sub-optimal use of new technologies.

I. RECOMMENDATION: Administrative staff should be part of the consultation and decision process when new technology is being considered.

Women staff are still often expected to perform menial tasks clearly outside their job description.

J. RECOMMENDATION: The University administration should issue a directive that staff are not to be asked or expected to perform housekeeping duties such as making, fetching or serving coffee, or personal work for supervisors.

### 5. THE CONCERNS OF FACULTY

#### 5.1 Faculty: Staffing

Our preamble pointed out a gender organization which differentiates women and men in relation to a career process, women tending traditionally to be assigned to positions lacking career opportunities. While such traditions have been modified, their effects are still built into the academic organization of the University. The disproportionate representation of women in sessional and non-tenure track appointments and the small proportion of women in more senior academic positions perpetuates this pattern. Such patterns have been documented for Canadian universities in general (for example, Breslauer, 1985; Boyd, 1979) and the University of Toronto is no exception: in 1984/85 women made up approximately 33% of assistant professors, 20% of associate professors and 9% of full professors - a total of 18% of the Faculty.

The career process in the academic context is distinctive. University faculties, schools and departments participate in disciplines and professions beyond the university. The career of an individual in the university is in part also a career within the profession or discipline, and the status of women within the university is closely related to their status outside. There has been some improvement in the positions of women in some of the disciplines traditionally dominated by men. In the decade from 1971 to 1981, for example, the female proportion of social scientists across Canada rose, but only marginally, and primarily through the infusion of junior academics whose positions are often contractually limited (Brodie, Andrew and Rayside, 1982).

At the same time, the number of women pursuing and obtaining professional qualifications in fields dominated by men is increasing. Hence even though more women are being hired, this increase does not fully reflect the increased availability of qualified women candidates.

##### 5.1.1 Objectives

The effects of previous discriminatory patterns mean that there are relatively few senior women available. Hence it is the intake and retention of junior faculty which is central to rectifying gender biases. Clearly at current rates at which junior positions open up, this will take time. Hence special efforts should be made to recruit and retain women at junior levels. When a disproportionate number of United States citizens were being hired for academic jobs in Canada, universities instituted measures to ensure that adequate searches for Canadians had been undertaken. Similar assertive action is needed for women.

A. RECOMMENDATION: Standards for search procedures should be developed going beyond the normal advertising to include at least the following:

1. contacting the chairs of relevant university departments to identify possible candidates, specifically including women.
2. seeking suggestions from women in the field within and outside the University and from organizations representing women in the discipline or profession.



B. RECOMMENDATION: Departments should formulate reasonable objectives, schedules and means to improve their gender profile (Appendix C). Such formulations would provide a criterion against which their actual performance could be evaluated in the three-year review of the gender-status of the University recommended in 2.5 above.)

C. RECOMMENDATION: Every hiring and promotions and tenure committee should include at least one woman member.

To ensure that the implementation of these recommendations not overload women junior faculty with administrative duties, committee work should be distributed among all women faculty including tutors and lecturers. Women junior faculty are quite commonly overloaded with administrative and sometimes also teaching duties (arising from the disproportion of women and men faculty) to the detriment of their scholarly work and hence eventually the possibilities of tenure.

#### 5.1.2 Monitoring Hiring, and Promotions and Tenure Proceedings

The intersection of scholarly or scientific discourse with the University is reflected in hiring and tenure and promotions procedures giving departments and schools considerable autonomy. In considering how these procedures might be modified to eliminate gender biases, departments must continue to be able to make decisions in accordance with the standards of excellence in their field and their knowledge of the particular needs of their departments. We have sought recommendations which will monitor the procedures used by departments while preserving the autonomous exercise of competent judgment.

D. RECOMMENDATION: The Provost should establish an ad hoc committee to formulate recommendations and guidelines advising departments how to avoid gender biases in hiring and promotions and tenure.

E. RECOMMENDATION: The Provost should establish a panel from the members of which committees could be formed to review procedures used by Departments in hiring and promotions and tenure procedures in accordance with such guidelines. Each constituted committee should include a representative of the Faculty Association and at least one woman. Reviews should attend to procedural matters only. Promotions and tenure proceedings of the University would not be considered completed until the committee had made its review. The denial of promotion or tenure should also be subject to review.

There is known to be a discounting effect whereby academic work attributed to women is seen as less valuable than comparable work attributed to men (see Goldberg, 1969; Smith, 1978). Departments should be made aware of the possible operation of this non-conscious source of bias.

F. RECOMMENDATION: Cases made by the department to the reviewing committee for appointing, promoting or giving tenure to given individuals, should clearly identify the grounds on which closely comparable candidates had not been appointed, promoted or given tenure and relate these to the general standards applied in recent similar decisions in the same department.

There are indications that while the proportions of women and men hired into tenure-stream positions are improving, the retention of women in tenured positions is disproportionately low. There are indications of different expectations of women both by departments and the women themselves, leading to misunderstandings about what course to follow to maximize the chances of achieving tenure.

G. RECOMMENDATION: Both women and men junior faculty would benefit from a discussion with the Chair of the department at the outset of their contract about the priorities of the department, and the criteria likely to be operative in determining their reappointment, promotion or tenure. The outcome of this discussion should be summarized in writing. Such discussion should explicitly address the issue of administrative duties and junior faculty should not be expected to undertake administrative duties beyond these expectations.

#### 5.1.3 The Implications of the Fiscal Crisis

A major barrier to increased representation of women in the faculty is the very low level of hiring into tenure stream positions in times of fiscal restraint. Precisely at the time when unprecedented numbers of women are acquiring professional skills, jobs do not exist. Breslaue (1985) suggests that women are multiply disadvantaged in these times. The rate at which the University can improve the proportion of women faculty depends on opening up existing places to younger scholars and scientists. The University has already moved to change its benefits package and its pension plan to make early retirement more attractive. Other possibilities to be considered are forms of job-sharing, tenure-stream and tenured part-time appointments, etc. Granting agencies in Canada can be alerted to the problem of the multiple disadvantages of women scholars and encouraged to develop specialized funding programs for women. For example, the National Science Foundation in the United States has established a program of Visiting Professorships for Women.

#### 5.2 Contractually-Limited Appointments

Canadian universities have responded to the fiscal crisis by increasing the number of term appointments. Women are disproportionately represented in contractually-limited positions, where they are burdened by a heavy load of teaching responsibilities, lack of access to resources facilitating research, and the need to look continuously for the next job (see Brodie et al., 1982). Their opportunities to publish and hence to establish themselves professionally are dramatically limited by their work conditions. The absence of secure employment perpetuates the unequal representation of women in a wide range of academic disciplines. It also stifles the fresh concerns a new generation of scholars should bring to the University.

Contractually-limited appointments ought to be used only when they are needed to fill short-term commitments. Departments should fill contractually-limited appointments only with those who can be considered for a tenure-stream appointment, and those who have occupied a contractually-limited position should be encouraged to apply for tenure-stream positions. Those occupying contractually-limited positions should be treated as full members of their departments, having access to conference travel funds, small-scale research funds, etc. on the same basis as other faculty, and function as regular voting members of the department.

H. RECOMMENDATION: The use of contractually-limited appointments should be restricted to short-term needs.

I. RECOMMENDATION: Guidelines should be established to ensure that those occupying contractually-limited positions are treated as full-fledged members of departments, including access to travel funds for conference and small-scale research or study funds available in the department, and function as regular voting members of the department.

J. RECOMMENDATION: Those occupying contractually-limited positions should be encouraged to apply for tenure-stream positions as they become open.

#### 5.3 Senior Tutors

Senior tutor positions within the University are held disproportionately by women. (Although neither UTA nor the Administration currently provide full data broken down by sex, all those consulted agree that this is the case. For example, of 18 Senior Tutors at Scarborough College, 12 are women.) The Haist Rules describe the position as a career position with little, or no involvement in individual research. There are several problems with this category:

1. Because there is no expectation of individual scholarly research, and because Senior Tutors often teach in laboratories, or in large first-year courses or in language classes, their work is deemed to be less taxing and their teaching load is heavier than normal—up to twice as many classroom hours.
2. Despite heavier teaching loads, Senior Tutors are paid at the level of Lecturers, sometimes on sessional contracts. Thus one Senior Tutor with a three-year sessional (nine-month) contract at a low salary level, found herself having to teach summer school to bring her income up to normal. This meant that she was teaching twice as much as a full-time faculty member at a salary of a non-tenured faculty member without a Ph.D.
3. Although the University claims no expectation of individual scholarly research, course and curriculum development themselves require considerable research. With an increased teaching load, little time is left to prepare research for publication, and there are limited possibilities for either obtaining funds or leave for professional development.
4. There is a group of Senior Tutors mostly holding doctorates, who undertake full professional duties (teaching in upper level and even graduate courses, doing administrative work and research). In these cases, the category of Senior Tutor is being used as an exploitative alternative to tenure-stream appointments.
5. "Invisibility"—the title itself lends invisibility to the position, implying merely an ancillary service to students rather than the considerable initiative that the position actually entails. The title compounds the problem of invisibility deriving from the lack of recognized status. For example, when a departmental office was asked to submit a list of women faculty to serve on a committee, the reply was that there were no women on the faculty. There were in fact six female Senior Tutors.
6. Senior Tutors are also required to present their work for evaluation every five years when their contracts are renewable. Contracts can be refused renewal for fiscal reasons. Tenured faculty with equivalent degrees, experience, and responsibilities do not have to be evaluated once tenure is attained. The policy for Senior Tutors is both exploitative and unjust.

K. RECOMMENDATION: The position of Senior Tutor should be reconstructed to give it genuine faculty status. This would include at least the following:

1. Salary ceilings should be abandoned, sessional appointments should be disallowed and work load should be more equitably assigned.
2. Guidelines should be established to ensure that those occupying these positions have access to departmental resources which will help encourage their professional development (e.g., travel funds, supported study or research leave).
3. A new title for the category should be found which recognizes the contribution of people occupying the position.
4. After review at the end of the first five-year contract, Senior Tutor contracts should be renewable without further review. Failure to renew should be grievable.
5. Senior Tutors holding a Ph.D. or Phil.M should be paid at a level appropriate to their qualifications.

L. RECOMMENDATION: Those presently in Senior Tutors positions should have the option of being considered for tenure-stream positions.

#### 5.4 Women and Research

The significance of status in the discipline for position in the University raises the issue of women's relation to research and research resources. Women's position in their discipline may be limited because research is still dominated by men who are the majority on editorial boards, granting agencies, grant review committees and executives of scientific organizations (Sheinin, 1984). Fields of research which are identified with women, such as family, women's studies, and women's health, are viewed as less important. As with the situation of women students, there is no recognition of differences in women's and men's life careers and no provision for the interruption in women's research careers resulting from childbearing.

The site of these difficulties in many instances lies outside the University of Toronto. Nonetheless the University of Toronto is not without influence. Hence our recommendation:

M. RECOMMENDATION: The University of Toronto should carry out a review of the situation of women and research at this University, formulate and implement appropriate policies and proposals, and where appropriate bring pressure to bear on relevant agencies, in the following areas:

1. The gender-composition of national umbrella organizations such as the Social Science and Humanities Research Council of Canada, the Natural Science and Engineering Research Council, the Medical Research Council, the Standing Committees on Science and Technology, and the Science Council of Canada, and the need for a greater representation of women on such bodies.
2. The gender-composition of disciplinary organizations (cf., Pyke, 1984).
3. The provision for parental leave in research stipends, fellowships, etc.
4. The establishment of special grants enabling women scholars to return to research in their field of specialization after extended periods of absence related to their family commitments (the National Science Foundation in the United States has such a program).
5. The development of research guidelines by the Office of Research Administration of the University of Toronto to ensure the equal treatment of the sexes in research. The principles of such guidelines have been formulated in the SSHRC publication "On the treatment of the sexes in research" (Eichler and Lapointe, 1985). Research contracts treating the sexes unequally should not be accepted by the University of Toronto.
6. An increase in funds for research on women's issues.

#### NOTE

The Ad Hoc Committee can be contacted by calling either Gayle Burt (978-6683), Annabel Cohen (828-5303), Janice Drachik (284-3168), Dorothy Smith (923-6641, ext. 2237), Pat Staton (923-6641, ext. 2520).

The complete version, including References, Appendices and supporting documents, will be available from:

Bladen Library (Scarborough Campus)  
Erindale Campus Library  
Roberts Library (reference desk)  
Women's Studies Library (New College, circulation desk)  
Women's Centre (49 St. George)  
Women's Resource Centre, O.I.S.E. (6th floor).



envelope. To create reserves and make reallocations within envelopes, the senior administrator with responsibility for each envelope may increase the target reduction.

The third note is perhaps the most important. The target reductions assume that the University Excellence Fund can be used as proposed. Thus they are in addition to base budget reductions that will be made in anticipation of support from the Excellence Fund. If the Fund cannot be used as planned — and since the terms of reference of the Fund are not known specifically, that is a real possibility — the individual target reductions would have to be increased to produce the overall base budget reduction of \$6.1 million. In that case the average target reduction would be at least two percent and possibly much higher for some "envelopes".

### Projected Increases in Salaries, Wages and Benefits

The costs of salaries, wages and benefits are by far the largest component of the University's operating budget. A one percent change in these costs amounts to \$2.6 million on an annual (as opposed to fiscal) basis, which in turn is 0.9 percent of the base budget. The impact of the projected cost of salaries, wages and benefits is powerful.

By including the existing progress-through-the-ranks (PTR) and merit increase programs in the salary settlements, the University has provided increases in compensation with costs in excess of inflation in recent years. Although these programs do recover some of their costs, they are far from being self-funding, and may never be unless the programs are restructured. The possibility of restructuring PTR will be discussed with the University of Toronto Faculty Association this year.

The budget strategy for 1986-87 will be to increase the overall cost of compensation by about \$12.4 million. An increase of this magnitude will consume all of the new income that the University may reasonably expect to receive in 1986-87, and nearly one-half of the funds that will be released by internal reallocation through budget reductions.

The proposed provision for an increase in the cost of compensation should be regarded as a working

hypothesis without prejudice to the outcome of salary and benefit discussions with the University of Toronto Faculty Association, the University of Toronto Staff Association, and other groups of employees not represented by those associations. If the outcome of those discussions is a smaller increase, the accumulated deficit can be reduced in anticipation of another very difficult budget in 1987-88, or additional high priority initiatives can be funded. If the outcome is a larger increase, it will necessarily be at the expense of other provisions, which in most cases will mean deeper cuts in base budgets.

The proposed provision for compensation does not imply that any decisions have been made, or, even, objectives set for the composition or size of compensation packages for any particular group of staff, academic or administrative.

### Obligatory and Protected Expenses

Within the University's operating budget there are several categories of expense which are obligatory, either because they are practically unavoidable (for example, utilities) or are required by formal agreement (for example, tuition waivers for staff dependents). Meeting these obligations does not imply that means should not be continually sought to achieve greater efficiency, to reduce the need for some of these expenses, or to review policies on which some of them are based. Each year these obligatory expenses must be indexed, usually to prices but in some cases to other factors, for example, enrolment:

1. Membership fees
2. Computer rental and service contracts
3. Tuition waivers
4. Rents, including examination space
5. Compliance with Atomic Energy Control Board, Occupational Health and Safety, and Bio-safety regulations
6. Utilities
7. Physical Plant contracted services
8. Audit fees
9. Insurance premiums
10. Postage
11. Research leave commitments for academic administrators
12. Transfer payments to other institutions (Federated Colleges)

Continued ▶

## Sources and Applications of Funds over 1985-86 Budget

	1986/87 Preliminary Budget Projection	1986/87 Budget Strategy	1987/88 Preliminary Budget Projection*
<b>A. New Income</b>			
1. Increases in formula grants and student fees			
(a) Increase in U of T formula grants	10.4	10.4	10.9
(b) Increase in student fees	1.6	1.6	1.5
(c) Decrease in distribution of visa supplement	(1.1)	(1.1)	(0.4)
(d) Other (including discretionary visa fees & fine art)	0.0	0.0	0.0
Sub-total	10.9	10.9	12.0
2. Increase (Decrease) in other income	(0.4)	(0.4)	0.5
Sub-total	10.5	10.5	12.5
<b>B. Funds made available by internal reallocation</b>			
3. Reduction in budget due to reversal of "one-time-only" additions to the 1985-86 budget	1.2	1.2	0.4
4. Additional reductions in base budget		3.2	
5. University Excellence Fund — Base Budget		1.5	
6. University Excellence Fund — "One-Time-Only"		1.4	(1.4)
Sub-total additional funds from internal reallocation	1.2	7.3	(1.0)
<b>Net additional funds from all sources</b>	<b>11.7</b>	<b>17.7</b>	<b>11.5</b>
<b>Allocation of net additional funds</b>			
1. Projected Increase in Salaries, Wages and Benefits	13.5	12.4	16.2
2. Obligatory increases	2.9	2.9	3.3
3. Reserve for Contingency and Reallocation	1.5	1.5	1.5
<b>Net allocation of additional funds</b>	<b>17.9</b>	<b>16.8</b>	<b>21.0</b>
<b>Net Increase in base budget shortfall over that of prior year</b>			
	(6.2)	1.0	(9.5)
<b>Base budget shortfall prior year</b>	<b>(1.0)</b>	<b>(1.0)</b>	<b>0.0</b>
<b>Base budget shortfall</b>	<b>(7.2)</b>	<b>0.0</b>	<b>(9.5)</b>

\* Assuming 1986/87 budget strategy is implemented.

### Budgetary Sources and Applications of Funds 1982-83 to 1986-87

	1982/83	1983/84	1984/85	1985/86	1986/87 Preliminary Projection	1986/87 Strategy
<b>Sources of funds</b>						
Increases in formula grants and fees	34.0	19.6	16.1	11.6	10.9	10.9
Increases in other income	4.1	(0.9)	0.6	1.6	(0.4)	(0.4)
Special grants		2.7				
Reduction in one-time-only expense allocations	1.5	2.4	3.2	3.2	1.2	1.2
Reduction in divisional budgets	3.1	12.8	2.7	3.8		3.2
Dedicated fund						
University Excellence Fund		5.0				
Total sources of funds	42.7	41.6	22.6	20.2	11.7	17.8
<b>Applications of funds</b>						
Increase in obligatory expenses	1.7	3.9	1.8	2.7	2.9	2.9
Increase in discretionary expense	10.4	4.8	2.7	3.1	1.5	1.5
Increase in salaries, wages and benefits	28.7	30.4	12.9	15.4	13.5	12.4
Special grant expenditures		2.7				
Dedicated fund			5.0			
Total applications of funds	40.8	41.8	22.4	21.2	17.9	16.8
Increased/Decreased in budget deficit	(1.9)	0.2	(0.2)	1.0	6.2	(1.0)

### Preliminary Budget Projections for 1986/87

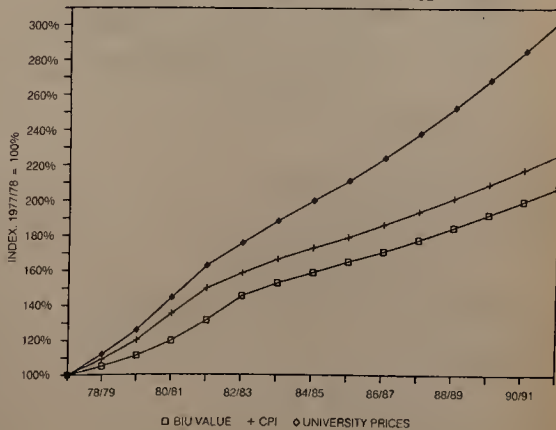
	1983/84 Actual	1984/85 Actual	1985/86 Budget	1986/87 Projected	1987/88 Projected	1988/89 Projected	1989/90 Projected	1990/91 Projected	1991/92 Projected
(in thousands of dollars)									
<b>Income</b>									
Formula Grant	242,391	254,409	264,701	275,077	286,000	296,844	308,318	320,425	333,181
Extra Fine Art Grant	53	47	58	34	36	37	38	40	42
Visa Fee Supplement	7,463	8,283	8,420	7,340	6,921	6,759	6,792	7,058	7,339
Regular Fees (BIU-related)	42,291	43,535	46,479	48,040	49,580	51,448	53,468	55,596	57,722
Discretionary Visa Fee	480	428	566	568	812	636	662	688	716
Special Grant	3,081	129							
Divisional Income	34,351	33,110	32,673	33,817	35,170	36,576	38,040	39,561	41,144
General University Income									
Interest	5,389	7,144	6,195	5,635	5,321	6,145	6,383	6,634	6,898
Other	5,448	5,548	5,334	5,437	5,554	5,881	6,116	6,360	6,615
<b>Total Income</b>	<b>340,757</b>	<b>352,733</b>	<b>364,426</b>	<b>376,028</b>	<b>389,894</b>	<b>404,326</b>	<b>419,817</b>	<b>436,361</b>	<b>453,657</b>

<b>Expenditures</b>									
Salaries and Benefits — gross	271,263	290,091	302,832	319,239	336,980	355,302	374,409	394,345	
less Academic PTR	(1,300)	(791)	(615)	(594)	(861)	(1,058)	(1,241)	(968)	
less Admin Maint Recovery	0	(800)	(205)	(212)	(221)	(229)	(239)	(248)	
Salaries and Benefits — net	269,963	288,500	302,012	318,433	335,899	354,017	372,929	393,129	
Other Expenses	261,404	270,093	289,500	302,012	318,532	335,899	354,017	372,929	393,129
Special Grant	77,812	80,170	76,880	79,571	82,754	86,064	89,507	93,267	96,811
Transfers Out (in)	3,081	129	0	0	0	0	0	0	0
	(2,227)	2,854	0	0	0	0	0	0	0
<b>Total Expenditures</b>	<b>340,170</b>	<b>353,218</b>	<b>368,380</b>	<b>381,583</b>	<b>401,286</b>	<b>421,963</b>	<b>443,524</b>	<b>466,016</b>	<b>489,940</b>
<b>Income — Expenditures (Shortfall)</b>	<b>587</b>	<b>(483)</b>	<b>(954)</b>	<b>(5,555)</b>	<b>(11,392)</b>	<b>(17,637)</b>	<b>(23,707)</b>	<b>(29,655)</b>	<b>(36,283)</b>
Cumulative Operating Deficit		(1,520)	(2,475)	(8,029)	(19,421)	(37,058)	(60,767)	(90,422)	(126,706)
Maximum Cumulative Deficit Allowed by Policy			(5,456)	(5,640)	(5,848)	(6,065)	(6,297)	(6,545)	(6,805)

### Preliminary Budget Projections for 1985/87

	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92
Rate of increase in system formula funding	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Rate of increase in Toronto formula funding	3.02%	3.97%	3.79%	3.87%	3.92%	3.98%	3.98%
Visa fee supplement	8,419,934	7,339,933	6,921,166	6,758,521	6,791,511	7,097,875	7,338,552
Proportional distribution of formula	67/33	33/67	0/100	0/100	0/100	0/100	0/100
Toronto share of system formula funding	21.76%	21.75%	21.74%	21.69%	21.66%	21.65%	21.64%
Rate of increase in CPI	3.50%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Rate of increase in non-salary expense	3.50%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Projected increase in cost of salaries, wages and benefits	5.96%	6.39%	6.32%	6.25%	6.18%	6.11%	

## INCREASE IN THE BIU VALUE VS. INFLATION 1977/78 PROJECTED TO 1991/92





block grant and Sheridan College transfer payment)

Some categories of expense are protected as a matter of policy against budget reductions and the effects of inflation. These categories are:

1. The library acquisitions fund
2. Graduate fellowships and bursaries
3. Undergraduate scholarships and bursaries

Protection of these expenses does not imply that they must be provided in any particular way (for example, through a centrally held fund) or that under-spending should not be taken into account. The principle of protection is that the general level of support should be maintained in real terms.

In addition to these obligatory and protected expenses, there are from year to year other obligations that must be met as a result of previous budgetary decisions which extended over more than one year. As a matter of budgetary principle, the annual Budget Report may make commitments that are incumbent on future Budget Reports. This is an important principle if the annual budget is to be an expression of plans and priorities. An application of this principle for 1986-87 is the requirement to fund the second year of the special purchase of computing equipment that commenced last year.

The additional funds needed to meet these obligatory and protected expenses in 1986-87 amount to \$2.9 million.

### Reserve for Contingencies and Reallocation

In each of the past several years, the Budget Report has included provisions for new or expanded programs and services. These provisions were discretionary in the sense that they could have been avoided had a high priority not been placed on them. These provisions have cost about \$3 million in each of the last two years, and cost nearly \$5 million in 1983-84.

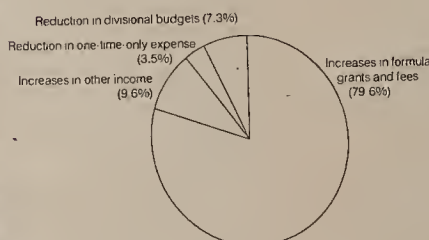
For 1986-87, \$1.5 million will be made available for two purposes: new or expanded programs and services, and adjustments of the target reductions if they prove unmanageable. Thus discretionary spending in 1986-87 should be about one-half comparable amounts in previous years, and probably less than that if the reserve has to be used to relieve target reductions. Obviously, if discretionary

spending is limited to this extent, only projects of critical importance can be considered for support in 1986-87. The University Excellence Fund may provide support for projects that require "one-time-only" funding.

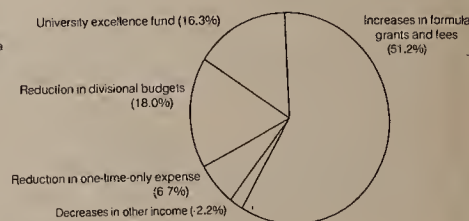
These steps taken together will produce a balanced budget. They represent a strategy, not a firm budget plan or schedule. That is the difference between the Budget Guidelines and the Budget

Report. But as a guideline, the strategy is more definitive and rigorous than Budget Guidelines have previously presented. It has to be. After a decade of budget reductions, a shortfall of \$7.2 million is, at best, an extremely serious problem. At worst, it is very nearly a crisis. If the shortfall projected for 1986-87 is not responsibly managed, a budgetary crisis will be a virtual certainty in 1987-88. ■

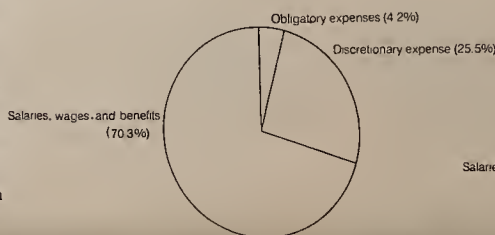
SOURCES OF FUNDS — 1982/83 BUDGET



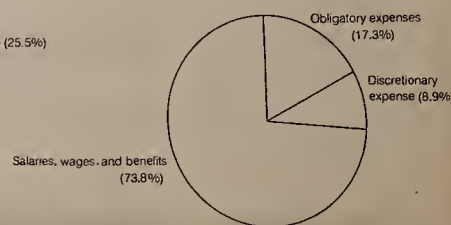
SOURCES OF FUNDS — 1986/87 BUDGET



APPLICATION OF FUNDS — 1982/83 BUDGET



APPLICATION OF FUNDS — 1986/87 BUDGET



### Budget guidelines

Continued from Page 1

not permit such a use, the guidelines recommend increasing the average cut to two percent.

The largest dollar cut recommended, about \$2.5 million (or one percent), is to the budget of the provost, whose office is responsible for financing the academic divisions, the library, and student services. If salaries and benefits were to increase at a rate that would ordinarily be expected, i.e., at a rate that keeps up with inflation (estimated in the guidelines at 3.5 per-

cent) and continues the PTR (progress-through-the-ranks) and merit programs, the increase would cost the University \$13.5 million next year. That would mean an increase of 4.7 percent over the current year's net salary and benefit cost of \$288.5 million. The guidelines propose a reduction to \$12.4 million — which translates to an increase of 4.3 percent — along with a restructuring of the PTR program to make it self-funding. "The theoretical foundation of this

approach to compensation is that PTR and merit increments are no-cost items," President George Connell told planning and resources. "In a steady state it should be possible to recover funds from the top and redistribute them to those advancing through their careers. But because of the skewed age distribution [of the faculty] this has appeared as a net cost for several years — there are not enough retirements." He said a re-examination of the principles underlying the University's approach to compensation has been undertaken by the Office of the Vice-President (Business Affairs). "We have to look at the actual outcome as well as the theory."

Administrative staff member Michael Jackel, former president of

the University of Toronto Staff Association, told the committee he saw in the guidelines a very depressing document that is not likely to sit well with faculty and staff. He took issue with the suggestion that something be done to change the compensation packages. Budget difficulties in recent years have caused the University to let members of the administrative staff go, he said, so that the staff members remaining have taken on additional duties, in some cases working beyond their designated hours without compensation. The merit program, which recognizes such efforts, should be retained, he said.



## Faculty of Arts & Science Teaching Workshops

February 4, 5, 6, 1986

The Faculty of Arts and Science is offering a second series of instructional development workshops.

Workshop topics include:

- Teaching Techniques
- Evaluation
- Computers and Teaching
- Language Teaching
- Teaching with Audio-Visual Aids

All interested faculty, teaching assistants and graduate students are welcome to attend. Workshops will be held at University College.

For further information contact:

Darlene Myers  
Executive Officer  
Faculty of Arts & Science  
978-4272

## UNIVERSITY OF TORONTO Bulletin

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## Conducting effective meetings

A course on "Conducting Effective Meetings", authorized by the Personnel Department and coordinated by the School of Continuing Studies for University of Toronto staff, begins Feb. 19. The course offers skills and knowledge in: chairing and participating effectively in meetings; developing leadership and group facilitation skills; understanding interpersonal styles; developing skills in problem-solving, decision-making, negotiating and managing conflict.

It will run each Wednesday for eight sessions, from 9 to 11:30 a.m., Feb. 19 to April 16. There is no session March 12.

For further details, call the Training & Development Office, Personnel & Labour Relations Department, at 978-6496.



# Governing Council Election

Nominations opened on January 13, for the following 13 seats on the Governing Council: 4 teaching staff seats; 1 administrative staff seat; 2 graduate student seats; 4 full-time undergraduate student seats; 2 part-time undergraduate student seats.

Prospective candidates are invited to obtain nomination forms and copies of the *Election Guidelines 1986* as soon as possible from the Governing Council Secretariat, room 106, Simcoe Hall or the Registrars' Offices at Scarborough and Erindale Colleges.

## The Governing Council

Governing Council is composed of 50 members including the President, the Chancellor, 16 government appointees, 12 teaching staff, eight alumni, eight students, two administrative staff and two presidential appointees. The Council and its committees are responsible for approval of such items as: academic and incidental fees, establishment of new academic programs, major admissions and awards policies, the University's

budget and other major financial matters, campus planning and capital projects, personnel policies, campus and student services, appointment of senior administrative officers.

All members of Governing Council must be Canadian citizens. Teaching staff and administrative staff members will serve three-year terms and students will serve one-year terms, beginning July 1st, 1986.

## Elections are required in the following constituencies

### I TEACHING STAFF

"Teaching Staff" means the employees of the University, University College, the constituent colleges and the arts and science faculties of the federated universities who hold the academic rank of professor, associate professor, assistant professor, full-time lecturer or part-time lecturer, tutor or senior tutor.

#### Constituency IA (1 seat)

All teaching staff members who hold their major appointments in the federated universities.

The term of Professor Frederick T. Flahiff expires June 30, 1986.

#### Constituency IE (1 seat)

All teaching staff members in the Faculty of Arts & Science who hold their major appointments in the Departments of Astronomy, Botany, Chemistry, Computer Science, Geology, Mathematics, Physics, Statistics and Zoology (excluding those whose major appointments are at Scarborough or Erindale Colleges).

The term of Professor Kenneth G. McNeill expires June 30, 1986.

#### Constituency II (1 seat)

All teaching staff members in the Faculty of Applied Science & Engineering.

The term of Professor S.M. Uzumeri expires June 30, 1986.

#### Constituency III (2 seats; 1 vacancy)

All teaching staff members in the Faculty of Medicine.

The term of Professor Bernhard Cinader expires June 30, 1986.

(The term of Professor William H. Francome continues until June 30, 1988.)

### II ADMINISTRATIVE STAFF

(2 seats; 1 vacancy)

"Administrative Staff" means the employees of the University, University College, the constituent colleges and the federated universities who are not members of the teaching staff.

The term of Ms. Rita T. Crump expires June 30, 1986. (The term of Mr. Michael Jackel continues until June 30, 1988.)

### III GRADUATE STUDENTS

"Graduate Student" means all students registered in the School of Graduate Studies.

#### Constituency I - (1 seat)

All students registered in Division I

(Humanities) and Division II (Social Sciences) of the School of Graduate Studies, with the exception of the Graduate Department of Education.

The term of Ms. Catherine Laurier expires on June 30, 1986.

#### Constituency II - (1 seat)

All students registered in Division III (Physical Sciences) and Division IV (Life Sciences) of the School of Graduate Studies, and in the Graduate Department of Education.

The term of Ms. Catherine Laurier expires on June 30, 1986.

### IV FULL-TIME

#### UNDERGRADUATE STUDENTS

"Full-time Undergraduate Student" means all students (except students registered in the Toronto School of Theology) registered at the University in a program of full-time study who are not registered in the School of Graduate Studies. All students in arts and science on all campuses will be considered full-time for electoral purposes if enrolled in four or more full-course equivalents over any two terms in an academic session (including the previous summer session).

#### Constituency I - (2 seats)

All students registered in the Faculty of Arts & Science including Erindale College and students at Scarborough College.

The terms of Mr. Maxwell Evans and Mr. Jonathan Harris expire on June 30, 1986.

#### Constituency II - (2 seats)

All students registered in the Faculty of Dentistry, Faculty of Nursing, Faculty of Medicine, Faculty of Pharmacy, School of Physical & Health Education, Faculty of Education, Faculty of Applied Science & Engineering, Faculty of Architecture & Landscape Architecture, Faculty of Forestry, Faculty of Law and Faculty of Music (with the proviso that both members elected in Constituency II not be registered in the same faculty or school).

The terms of Ms. Lillian Chu and Mr. Tony Clement expire on June 30, 1986.

### V PART-TIME UNDERGRADUATE STUDENTS - (2 seats)

"Part-time Undergraduate Student" means all students (except students registered in the Toronto School of Theology) registered at the University

in a program of part-time study who are not registered in the School of Graduate Studies. All students in arts and science on all campuses will be considered part-time if enrolled in fewer than four full-course equivalents

over any two terms in an academic session (including the previous summer session).

The terms of Ms. Claire Johnson and Mrs. Jovita Nagy expire on June 30, 1986.

## Election schedule

The following is a partial schedule:

Nominations open  
Nominations close  
Announcement of candidates  
Mailing of ballots  
Close of election  
Announcement of results

January 13  
January 24, noon  
January 30  
February 19, 20 and 21  
March 11, noon  
March 18

## Regulations

Complete information on the regulations governing the elections is contained in the *Election Guidelines 1986* available from the Governing Council Secretariat. The *Guidelines* detail the process of nomination and election. Please feel free to drop in and discuss any questions about the election or the function of Governing Council with the Chief Returning Officer, Ms. Susan Girard, room 106, Simcoe Hall, or telephone Ms. Girard at 978-6576. Students and staff on the Scarborough or Erindale campuses can pick up nomination forms and the *Guidelines* at the Office of the Registrar.

Please note that nomination forms must be signed by the following

numbers of nominators from the appropriate constituency:

Teaching staff	10
Administrative staff	20
Graduate students	15
Full-time Undergraduate students	30
Part-time Undergraduate students	15

## Close of nominations

Nomination papers must be filed by noon, Friday, January 24, 1986 at the Governing Council Secretariat, room 106, Simcoe Hall. Nominations received elsewhere or after that time and incomplete nominations will be invalid. Early submission of nomination papers will provide time for corrections, if needed, before the deadline.

## NEUROSCIENCE LECTURE SERIES 1985-86 UNIVERSITY OF TORONTO

All lectures will be held on Tuesdays from 5:00 to 6:00 pm in room 2172 of the Medical Sciences Building, 1 King's College Circle, University of Toronto

## ADVANCES IN SENSORY PHYSIOLOGY

### JANUARY 28

Max S. Cynader  
Dalhousie University

### SIMILARITIES BETWEEN VISUAL AND AUDITORY PROCESSING

### FEBRUARY 4

Ester P. Gardner  
New York University, School of Medicine

### HOW DO CORTICAL NEURONS DETECT MOTION ACROSS THE SKIN?

### FEBRUARY 11

George D. Pollack  
University of Texas

### REPRESENTATION OF ACOUSTIC SPACE IN THE BAT'S INFERIOR COLLICULUS.

### FEBRUARY 18

Jon H. Kaas  
Vanderbilt University

### WHY DO SENSORY SYSTEMS HAVE SO MANY SUBDIVISIONS?

### FEBRUARY 25

William C. Stebbins  
University of Michigan

### INFERRING STRUCTURAL PURPOSE FROM PERCEPTUAL FUNCTION: THE INNER EAR FROM THE PERSPECTIVE OF A BEHAVIOURIST.



# Events

## Lectures

### Cogitamus, Ergo Sumus: The Intentionality of the First-Person Plural.

*Monday, January 20*  
Prof. David Carr, University of Ottawa, Prof. Chapter House, University College. 2 p.m. (Philosophy)

### Lessons from the 1985 Mexican Earthquake.

*Monday, January 20*  
Prof. Denis Mitchell, McGill University, and John Adams, Department of Energy, Mines & Resources, Ottawa. 1101 Sandford Fleming Building. 4 p.m. (Civil Engineering)

### The Non-Virgin Birth: The 18th-Century Origins of the Motion Picture.

*Tuesday, January 21*  
John Kuyner, International Museum of Photography, Rochester, NY; lecture-discussion, Robert Gill Theatre, Koffler Student Services Centre. 12.15 p.m. (Drama Centre and Cinema Studies, Innis)

### Privacy and Understanding.

*Tuesday, January 21*  
Prof. Charles Travis, Tilburg University. 152 University College. 4 p.m. (Philosophy)

## Seminars

### Mental Preparation for Elite Performance.

*Monday, January 20*  
Prof. P. Jensen, York University. 330 Benson Building. 4 p.m. (P&HE)

### Internal and External Dimensions of Economic Policy.

*The International Economic Environment and the Policy Issues for Canada.*  
*Monday, January 20*  
Sylvia Osty, ambassador for multilateral trade negotiations; public policy workshops. 3050 Sidney Smith Hall. 4 to 6 p.m. (Political Science)

### The Educational Composition of Canada's Future Elderly.

*Tuesday, January 21*  
Dr. Richard Osborn, Department of Preventive Medicine & Biostatistics; research seminar on aging. 104 McMurrich Building. 3 to 5 p.m. (Gerontology)

### Fibroblast Growth Factor.

*Tuesday, January 21*  
Dr. Andrew Baird, Salk Institute, La Jolla. 181 Banting Institute. 4 p.m. (Banting & Best Diabetes Centre and Clinical Biochemistry)

### Law and Economics Workshop Series.

*Economics of Tort Law.*  
*Wednesday, January 22*  
Prof. Steven Shavell, Harvard Law School.

*Post-Contractual Employment Restraints.*  
*Friday, January 24*  
Prof. M.J. Trebilcock, Faculty of Law.

### An Economic Analysis of Legal Transitions.

*Wednesday, January 29*  
Prof. Louis Kaplow, Harvard Law School. Solarium, Falconer Hall. 12 noon to 1.45 p.m. Copy of paper in advance \$3 (includes lunch) from Verna Percival, Faculty of Law, 978-6767.

### How Pythagoras Summoned the Muse: the Computer and Literature.

*Tuesday, January 21*  
Prof. Robert Chuet, York University. Upper Chapter House, University College. 2 p.m. (Computing in the Humanities)

### Gender and Science: Why Is It So Hard to Count Past Two?

*Wednesday, January 22*  
Prof. Evelyn Fox Keller, Northwestern University. Room 3, Northrop Frye Hall, Victoria College. 4.10 p.m. (Philosophy)

### Ancient Composite Bows.

*Wednesday, January 22*  
Prof. Wallace McCord, Department of Classics, Lecture room, McLaughlin Planetarium. 4.30 p.m. (Toronto Society, Archaeological Institute of America)

### The Marsh Arabs.

*Wednesday, January 22*  
Prof. Albertine Jwaideh, Department of Middle East & Islamic Studies. Auditorium, Medical Sciences Building. 8 p.m. (Society for Mesopotamian Studies)

### The Genetics and Evolution of Breeding Systems in the *Turnera ulmifolia* Complex.

*Wednesday, January 22*  
Joel Shore, Department of Botany. Room 7, Botany Building. 3.30 p.m.

### Learning and Selection in the New Connectionism: Individual and Population Thinking.

*Wednesday, January 22*  
Prof. Charles Lumsden, Department of Medicine; Cognitive Science seminar series. Coach House, 39A Queen's Park Cresc. E. 4 p.m. (McLuhan Program)

### Merchants, Money and Manuscripts: The Drama of the London Livery Companies.

*Friday, January 24*  
Prof. Anne Lancashire, Department of English. Front common room, UC Union, 79 St. George St. 12 noon. (REED and PLS)

### Reading Manuscripts from Petrarch to Milton (1350-1650).

*An Introduction to Paleographical Principles.*  
*Friday, January 24*  
Abigail Young, Records of Early English Drama.

### Paleography and Diplomatics in Italy, I.

*Friday, January 31*  
Edward English, Records of Early English Drama and Centre for Reformation & Renaissance Studies. Third and fourth in series of 10 workshops in manuscript research and paleography. 816 Pratt Library, Victoria College. 2 to 4 p.m. (Reformation & Renaissance Studies and REED)

### Legal Aspects of Monitoring Peace Treaties.

*Wednesday, January 22*  
Murray Gold and Michael Green, Lawyers for Social Responsibility. 179 University College. 8 p.m. (Science for Peace, Physicians for Social Responsibility and Lawyers for Social Responsibility)

### Matthias Flacius and Luther.

*Thursday, January 23*  
Prof. Oliver K. Olson, Marquette University, Milwaukee. Senior Common Room, Burwash Hall, Victoria College. 4 p.m. (Reformation & Renaissance Studies)

### Individual Demarcation between Public and Private Values in Evolutionary Biology.

*Thursday, January 23*  
Prof. Evelyn Fox Keller, Northwestern University. 304 Victoria College. 4.10 p.m. (Philosophy)

### Aristotle versus Freud on the Interpretation of Dreams: A Working Paper.

*Friday, January 24*  
Prof. David Gallop, Trent University. 148 University College. 3 p.m. (Classics)

### The Function of Flowers.

*Friday, January 24*  
Prof. Graham Bell, McGill University. Room 7, Botany Building. 3.30 p.m.

### Bucolic Myths: Towards a More Urbanist Environmentalism.

*Friday, January 24*  
Prof. Robert Paehlke, Trent University. Room 204, 455 Spadina Ave. 12.15 p.m. (Urban & Community Studies)

### My Marriage to Reductionism: The First Decade.

*Friday, January 31*  
Prof. Doug Larson, University of Cuelph. Room 7, Botany Building. 3.30 p.m.

### Social Security Policy: A Redefinition of the Role of the State?

*Social Security Policies and the Safety Net: The Question of Cost Effectiveness.*  
Wendy Dobson, C.D. Howe Institute. Public policy workshops. 3050 Sidney Smith Hall. 4 to 6 p.m. (Political Science)

### Adult Illiteracy.

*Monday, February 3*  
Guy Ewing, McLuhan Program in Culture & Technology; Problems in Literacy seminar series. Coach House, 39A Queen's Park Cresc. E. 7.30 p.m. (McLuhan Program)

### Trade and Politics.

*Thursday, January 23*  
Prof. Charles Doran, Johns Hopkins University; Claude T. Bissell visiting professor of Canadian-American relations; third in series of four, "Canada and the United States: Mutual Vulnerabilities". George Ignatieff Theatre, Trinity College, Devonshire Place. 8 p.m. (International Studies)

### Women, Money and Academic Opportunities.

*Friday, January 24*  
Provost Joan Foley; keynote address, Institute of Medical Science annual scientific day. Debates Room, Hart House. 11.45 a.m.

### Nutritional Support of the Surgical Patient: From Basic Science to Clinical Strategies.

*Friday, January 24*  
Dr. Lloyd D. MacLean, McGill University; Institute of Medical Science lecture. Debates Room, Hart House. 4.15 p.m.

### Canada.

*Sunday, January 26*  
Hon. Jean Chrétien, MP; Dons' Brunch-and-Speaker series. I.M. Spiegel Hall, South Building, Erindale College. 11 a.m. Tickets \$6, students \$5, must be picked up by Thursday preceding session. Information: Housing Office, 828-5286 or 828-5279.

### Advances in Sensory Physiology.

*Similarities between Visual and Auditory Processing.*  
*Tuesday, January 28*  
Prof. Max S. Cynader, Dalhousie University; neuroscience lecture series. 2172 Medical Sciences Building. 5 p.m.

### Security for Survival.

*Wednesday, January 29*  
Arnold Simoni, Science for Peace, Toronto. 179 University College. 8 p.m. (Science for Peace, Physicians for Social Responsibility and Lawyers for Social Responsibility)

### The Psychology of Decisions.

*Thursday, January 30*  
Prof. Daniel Kahneman, University of British Columbia. S-309 Scarborough College. 4 p.m.

### The United States, France and West German Foreign Policy: The Emergence of Organized Disagreement.

*Thursday, January 30*  
Prof. Gustav Schmidt, Ruhr Bochum University; 1985-86 visiting professor of German and European studies. George Ignatieff Theatre, Trinity College, Devonshire Place. 8 p.m. (International Studies)

### Processes of Ethnic Interaction and Integration in Ethiopia.

*Monday, February 3*  
Prof. Tadesse Tamrat, Addis Ababa University. 2053 New College, 30 Wilcocks St. 2 p.m. (Medieval Studies, International Studies and Humanities, Scarborough)

### The Historian's Indian: Native Americans in Canadian Historical Writing from Charlevoix to the Present.

*Monday, February 3*  
Prof. Bruce C. Trigger, McGill University; first of two Seagram lectures. George Ignatieff Theatre, Trinity College, Devonshire Place. 4 to 6 p.m. (History)

### Psyching Women Out.

*Monday, February 3*  
Prof. Paula Caplan, Ontario Institute for Studies in Education; Popular Feminism lecture and discussion series. 2-211 Ontario Institute for Studies in Education, 252 Bloor St. W. 8 p.m. (Centre for Women's Studies in Education)

### Monasticism and Education in Medieval Ethiopia.

*Tuesday, February 4*  
Prof. Tadesse Tamrat, Addis Ababa University. H-305 Scarborough College. 2 p.m. (Medieval Studies, International Studies and Humanities, Scarborough)

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# Events

## Meetings & Conferences

**Introspections on the Idea of Succeeding.**  
Tuesday, January 21  
Vice-President & Provost Joan Foley; meeting of U of T Women's Network. University Women's Club, 162 St. George St. 7.30 to 9 a.m.  
Information: 978-2665.

**Conservatism.**  
Tuesday, January 21 to Saturday, January 25  
University College Symposium Eight. All events take place in 179 University College unless otherwise stated.  
Tuesday, January 21  
Official opening, President George Connell and Principal Peter Richardson. West Hall, 4 p.m.  
Orford Quartet with guest cellist Simca Heled. West Hall, 4.30 p.m.  
Tango by Slawomir Mrozek, production by UC drama program. UC Playhouse, 79A St. George St. Tuesday to Saturday, 8 p.m.  
Reservations: 978-6307

Wednesday, January 22  
"The Lost Leader": Wordsworth's (and Coleridge's) Road towards Conservatism; Conservatism, a New Political Word in Early 19th Century England. 9.30 to 11 a.m.  
What Should Conservatives Conserve? 11.15 a.m. to 12.15 p.m.  
Personal Conservatism in Three Victorian Intellectuals: Carlyle, Mill, Arnold. 12.30 to 1.20 p.m.  
Canadian Literature and the Development of a Conservative Tradition. 1.20 to 2 p.m.  
Beyond Liberalism and Conservatism. 2.15 to 4 p.m.  
The Influence of the Ecclesiological Movement on Canadian Church Architecture. 4.30 to 5.30 p.m.  
Thursday, January 23  
Conservatism and Scepticism: The Implausible but Happy Marriage. 9.30 to 11 a.m.  
Conservative Interpretations of Revolution. 11.15 a.m. to 3.30 p.m.  
How Right is the Right in Canada? 3.45 to 5.30 p.m.

Friday, January 24  
Conservatism in Education: The Pendulum's Path from Living and Learning to O.S.I.S. Auditorium, Medical Sciences Building. 9 a.m. to 12 noon.  
New Songs and Old Battles: Glimpses of Music in the Middle Ages, Renaissance and 20th Century Toronto. 12 noon to 1.30 p.m.  
Canadian Morality: The Tenacity of Conservative Attitudes toward Sexuality and Gender. 1.35 to 3.10 p.m.  
Richard Wagner in the Age of Bismarck. 3.15 to 3.55 p.m.  
Double Conservatism in Film: Peter Weir's *Witness*. 4 p.m., screening of film 4.25 p.m.  
Saturday, January 25  
Religion and Politics: The Dinner Table No-No. 10 a.m.  
Debate and Discussion. 11.15 a.m. to 12 noon.  
Luncheon; speaker: Hon. Larry Grossman, MPP. Croft Chapter House. 12 noon.  
Tickets \$10 from Debbie Nelles, UC Alumni Office, 978-2968.  
Information and symposium program: 978-8746.

**Eccentric Views on Paul, Israel and the Gentiles.**  
Thursday, January 23  
Symposium, Centre for Religious Studies, Department of Religious Studies, TST and UC.  
For All the Believers: The Inclusion of Gentiles as the Ultimate Goal of the Torah. 4 p.m.  
Israel's Ministry in the Eyes of Paul. 7 p.m.  
Croft Chapter House.  
Information: 978-3160.

**Institute of Medical Science.**  
Friday, January 24  
Annual scientific day. Student and staff presentations. Keynote address and IMS lectures; see Lectures for details. Debates Room, Hart House. 9 a.m. to 5.15 p.m.  
Information: 978-5012.

**How Right is the Right in Canada?**  
3.45 to 5.30 p.m.

## Plays & Readings

**Tango**  
January 21 to 25  
By Slawomir Mrozek. UC Playhouse, 79A St. George St. 8 p.m.  
Tickets \$3.  
Reservations: 978-6307.

**Jacob's Wake.**  
January 22 to 25  
By Michael Cook; Scarborough Drama Club production. TV Studio One, Scarborough College. 8 p.m.  
Admission free; donations welcome.  
Information: 284-3126.

**Three Sisters.**  
January 22 to 25  
By Anton Chekhov; Graduate Centre for the Study of Drama 1985-86 Hart House Theatre season. Performances 8 p.m.  
Tickets \$8, students and senior citizens \$4.  
Reservations: Monday to Friday 11 a.m. to 5 p.m., performance Saturdays only, 1 to 5 p.m.; lobby box office open 5 p.m. to curtain time. Box office: 978-8668.

**Buried Child.**  
January 28 to February 2  
By Sam Shepard. Third of six plays in Graduate Centre for the Study of Drama studio season. Robert Gill Theatre, Koffler Student Services Centre. Tuesday to Saturday 8 p.m.; Sunday 2 p.m.  
Tickets \$5, students and senior citizens \$3.  
Reservations: Monday to Friday 11 a.m. to 5 p.m., 978-8668; performance box office opens one hour prior to curtain time, 586-7986.

**Richard Lush**  
*A Manual for Lying Down.*  
Anne Michaels  
*The Weight of Oranges.*  
Thursday, January 30  
Poets will read from their works. Innis College Town Hall. 8 p.m.

**Variety Night.**  
January 31 and February 1  
Hart House Theatre. 8 p.m.  
Tickets \$4 in advance from SAC; \$5 at the door. (Blue & White Society)

## Music

**EDWARD JOHNSON BUILDING FACULTY OF MUSIC**

**The Role of the Concertmaster.**  
Thursday, January 23  
Steven Starky, Toronto Symphony Orchestra; Thursday noon series. Walter Hall. 12.10 p.m.

**U of T Symphony Orchestra.**  
Saturday, January 25  
Michel Tabachnik, conductor. MacMillan Theatre. 8 p.m.  
Tickets \$8, students and senior citizens \$5.

**U of T Wind Symphony.**  
Sunday, January 26  
John Barnum, conductor. MacMillan Theatre. 3 p.m.  
Tickets \$3.

**Flute Master Class.**  
Monday, January 27  
Paula Robison. Walter Hall. 7 p.m.

Information on all events in the Edward Johnson Building available from the box office, 978-3744.

## Colloquium

**Molecular Synthesis behind Interstellar Shocks.**  
Wednesday, January 23  
Prof. George F. Mitchell, St. Mary's University. 137 McLennan Physical Laboratories. 3.10 p.m. (Astronomy)

## Films

**Speaking Our Peace.**  
Wednesday, January 23  
With University Prof. Ursula Franklin, Department of Metallurgy & Materials Science. 179 University College. 12 noon. (Status of Women Committee)

**Dadi's Family.**  
Wednesday, January 22  
Room 154, level A. Audio-visual Library, Sigmund Samuel Library. 12 noon. (South Asian Studies)

## Miscellany

**Red Cross Blood Donor Clinic.**  
Monday, January 27 to Friday, January 31  
Lobby, Medical Sciences Building. Monday, Tuesday, Friday, 10 a.m. to 4 p.m.; Wednesday, Thursday, 10 a.m. to 5 p.m.

**Health Fair.**  
Wednesday, January 29  
Organized by students in Health Promotion Project, Faculty of Nursing. Displays on health services on campus, other health professions faculties and community agencies. Films on stress, nutrition, fitness, sexuality, drug abuse and smoking. 50 St. George St. 10 a.m. to 4 p.m.

## ROYAL CONSERVATORY OF MUSIC

**Noon Hour Series.**  
Wednesday, January 22  
Oak Hyon Kim, piano.  
Wednesday, January 23  
Mary Kenedi, piano.  
Concert Hall. 12.15 p.m.

**Twilight Series.**  
Thursday, January 23  
Jean MacPhail, mezzo-soprano, with Derek Bampton, piano. Concert Hall. 5.15 p.m.  
Tickets \$2, students and senior citizens \$1.

**Master Class for Cellists.**  
Monday, January 27  
Marc Drobinsky. Concert Hall. 7 p.m.

**Marc Drobinsky, Cello, and Victor Danchenko, Violin.**  
Tuesday, January 28  
Concert Hall. 8 p.m.  
Tickets \$5, students and senior citizens \$3.

**Royal Conservatory Orchestra.**  
Friday, January 31  
Joel Thome, conductor. Church of the Redeemer, Bloor and Avenue Rd. 8 p.m.  
Tickets \$9.50 and \$6.50; students, senior citizens and handicapped \$7 and \$4.50. RCM box office 978-5470.

Information on all Conservatory concerts available from publicity office, 978-3771.

## Exhibitions

**Scarborough College.**  
To January 24  
Sight of Music, Wendy Syme.

**January 27 to February 14**  
Faces of Feminism, in conjunction with women's studies program. Gallery hours: Monday-Thursday, 9 a.m. to 7 p.m.; Friday 9 a.m. to 5 p.m.; Sunday 2 to 5 p.m.

**Coup d'Art.**  
To January 24  
Faculty of Education student art exhibition. Room 24, Faculty of Education, 371 Bloor St. W.

**Robarts Library.**  
To January 29  
University Settlement, display of historical photographs and text celebrating 75th anniversary of founding of University settlement. Main display area.

**To February 2**  
March of Dimes; sponsored by Services to Disabled Persons. South Lobby display case.

**February 3 to 23**  
Muscular Dystrophy Association; sponsored by Services to Disabled Persons. South lobby display case.

**Justina M. Barrieke Gallery, Hart House.**  
To January 30  
East Gallery: Reina Nieland, collages.  
West Gallery: Canadian Holography Now. Gallery hours: Tuesday-Saturday, 11 a.m. to 6 p.m.

**Persephone Going and Coming.**  
To January 31  
Collages by M.L. Knight. Ground floor, Northrop Frye Hall, Victoria College.

**Erindale College.**  
To February 16  
Peter T. Beckett, Paintings and Studies 1981-1986. Gallery hours: Monday-Friday 11 a.m. to 7 p.m.; Saturday-Sunday 12 noon to 5 p.m.

**Faculty of Architecture & Landscape Architecture**  
January 21 to February 7  
Ten Years of Norwegian Architecture, and The Work of Sverre Fehn. Galleries, 230 College St. Gallery hours: Monday-Friday, 9 a.m. to 5 p.m. except Thursday to 8 p.m.

## Governing Council & Committees

**Planning & Resources Committee.**  
Monday, January 20  
Please note: Meeting cancelled.

**Business Affairs Committee.**  
Wednesday, January 22  
Council Chamber, Simcoe Hall. 4 p.m.

**Admissions, Curriculum & Standards Subcommittee.**  
Wednesday, January 23  
Council Chamber, Simcoe Hall. 4 p.m.

## UTSC NEWS university of toronto computing services

### UTSC Short Courses — Start the Year Off Right!

Remember that New Year's resolution you made to take some UTSC short courses? No?! (Must have been some party!) Well, now's your chance to make amends. UTSC short courses are hands-on so you retain more of what you learn. And when you do have problems, the course instructor can answer your questions immediately. So instead of buying 1000 penny candies (they'll only rot your teeth), use the money to register for one of the following short courses:

### FORT/CMS101 — CMS for FORTRAN Users

For those with a working knowledge of FORTRAN, this course offers the following topics: editing and managing CMS files; communicating electronically with local and international users; writing command scripts (EXECs); compiling, executing, and debugging FORTRAN programs in the CMS environment; FORTRAN Interactive Debug (IAD). The IAD is a very useful tool for program development. The programmer can: trace the value of variables as the program executes; check array indices to see if they go out of bounds; and; set stop points in the program to examine or change variable values. Along with several other features, IAD reduces the time it takes to get a clean production program. February 3-7 9:30-12:30 noon (fee — \$10)

**JCL101 — IBM JCL for Beginners** This course introduces the user to IBM Job Control Language (JCL). Topics include the JOB, EXEC and DD statements which are the main building blocks of JCL. Knowledge of a programming language or an operating system is required. February 10-14 2:00-3:00 p.m. (fee — \$10)

**TXTCMS101: XEDIT and SCRIBE on CMS** This course teaches the basics of CMS (Conversational Monitoring System), the text editor XEDIT and the text formatter SCRIBE. XEDIT is a full screen editor with many features including power input, block move and delete and text search and replace. SCRIBE is a powerful formatter that can do automatic pagination, handles footnotes, backward and forward page references, can build a table of contents and even create an index. January 20-31 9:30-11:30 a.m. (fee — \$10)

**TXTCMS202 — Special SCRIBE Topics** This workshop style course is intended for current SCRIBE users wishing to pursue special SCRIBE features. Topics include bibliographies, hyphenation, mathematical expression formatting and thesis preparation. Topics covered will be determined by the course participants. Indicate your preference when registering. January 27-29 1:00-3:00 p.m. (fee — \$10)

For additional information on these courses, or to register, contact Irene Rosiecki, 978-4565

Communications and Computer Systems Consulting	978-4967
General Advising	978-HELP
Statistical Advising	978-STAT
Marketing	978-6875
Micro Support	978-8701



# A CRAY supercomputer at any price?

by George J. Luste

Is bigger and better computing desirable at U of T? There is no disagreement — it is essential. But that is not the issue. What is at issue is the specific CRAY supercomputer proposal presented to various Governing Council committees by the central administration. The question is whether or not this is an appropriate and affordable proposal. My strong view is that it is neither; worse, it has the potential of inflicting losses in the tens of millions of dollars on the University over the next five years.

For some time now there has existed a critical need for improved large scale and low cost research computing, in all its many forms, at the University of Toronto. In 1983, I approached the Simcoe Hall administration about my concerns on the lack of focussed large scale computing on campus and eventually the supercomputer committee, under the chairmanship of the vice-president for research, came into being. Its progeny in turn is the present CRAY X-MP/24 proposal (shortened to "CRAY" in this discussion). Unfortunately this proposal is, in my view, a threatening Frankenstein monster. An earlier version of this proposal was submitted to the provincial government, which has tentatively committed a total of \$10 million over three years for an Ontario supercomputer site. This potential prize is what is driving the current proposal and debate.

Unless you, the reader, have already participated in this debate, you may be shaking your head at this point with disbelief, asking: "how can it be that with a large sum like \$10 million available, the current proposal is not affordable?" It is not if the goal is to capitalize and operate productively a CRAY class supercomputer for five years or thereabouts. In round numbers, a CRAY operation requires close to \$10 million per year or an astounding \$50 million for the first five years. In the U of T CRAY proposal budget, the total expenditures are estimated at \$27 million for the first five years. In my view this seemingly large number is too low and should be increased substantially if it is to realistically and fully fund a productive CRAY facility as is intended. But even if one accepts the proposed figure of \$27 million, there remains the critical question: "Where will the \$17 million difference between the budget total of \$27 million and the provincial \$10 million come from?" At present nobody seems to have a definite answer.

## Meeting tonight to discuss supercomputer proposal

A review committee has been convened by Professor Geraldine Kenney-Wallace, chairman of the Research Board to examine the supercomputer proposal (*Bulletin*, Jan. 6). An open hearing is being held by the committee at 8 p.m. this evening in room 1101, Sandford Fleming Building.

To introduce the important and complex issue, "What does a supercomputer operation cost?", it may be worth examining the global dollar amounts involved in the four recently funded sites in the US: Cornell, Illinois, Princeton and San Diego. (Both Illinois and San Diego are CRAY sites.) Their total funding over five years is astronomical compared to the U of T scale. The National Science Foundation (NSF) contribution alone is \$269 million (all dollars in this article refer to equivalent Canadian dollars) which comes out to an average of \$67 million per site over five years (see ref. 1). The corresponding average state and university commitment is an additional \$31 million per site over five years and the corporate contributions are expected to add another \$61 million per site (these are all averages). Assuming that the corporate number has been inflated by optimism rather than realism, let's reduce it by 50 percent and then total the three contributions. This average total comes to \$128 million per site over five years or \$26 million per site per year. This is almost off scale when compared to the total of \$10 million "in hand" for the U of T CRAY proposal. Why this difference? Several reasons come to mind. Obviously they intend to do far more than just purchase the equipment, move it into a building and pay the maintenance contract. They have, I believe, decided that in order to ensure that the supercomputer sites are used productively and to get the science out, they must provide substantial infrastructure support. This includes building costs, extensive support for supercomputer peripherals and technical support staff, as well as funds for new research staff appointments who will in turn exploit this tremendous computing potential more effectively. One has to ask: "Is this important or perhaps essential in a multidiscipline university environment?" Apparently the NSF must have thought so, for politically it would have been far easier for them to fund 27 separate sites at \$10 million each rather than the four at \$68 million each. Undercapitalization is a major cause of many disasters. Before we make a commitment to acquire a CRAY and to try and use it productively with under \$10 million per year, we should address this issue. The information is out there.

In this article I use \$10 million per year for the U of T site. This reflects our smaller user and infrastructure need. I am trying to be more than fair but I am not sure that this is terribly wise.

The vice-president for research is on record at Governing Council committees as stating that the CRAY proposal describes a facility that would be completely self financing. These are brave words. Regrettably they remind me of Mayor Drapeau's famous boast that it was impossible for the Montreal Olympics to have a deficit. As I see it, it's only a matter of how many millions per year. Somewhat interesting and even more ironic is the observation that the less efficiently we intend to use the CRAY, the less our financial losses would be. The financial losses will be minimized if we simply put the CRAY in a dark closet and don't use it at all since this silly suggestion requires the least amount of operating expense and infrastructure support.



STEVE BEHAL

An undercapitalized facility is part way into that closet.

The CRAY proposal represents what would be an instantaneous increase of about 2,000 percent in total installed megaflop computing capacity at U of T. This increase, which seems a bit excessive to me, reflects the fact that no careful or quantitative analysis of need was performed prior to the decision to go for the CRAY.

The concept of "productive and efficient" use of a supercomputer facility is vital, bearing in mind that computers do not follow traditional rules of thrift, as a pair of shoes might. An unused or misused second of computing is lost and wasted forever. (Like the seconds in your life.) Worse still, advancing technology guarantees that today's computing second will cost less tomorrow. This leads to one of my simple rules for computer acquisition: "Pay careful attention to how much CPU capacity you really need and beware of overly optimistic growth projections. Purchasing computing capacity you don't use or don't use effectively is akin to throwing money away." In the case of supercomputers this represents a great deal of money and it is distressing that the current CRAY proposal has not been restrained by this basic concept.

If indeed the CRAY should be acquired, the research users of it will undoubtedly be the beneficiaries of a tremendous resource. For instance, if only 100 research users were to use the CRAY, then the annual and individual research user cost will be \$100,000, on the assumption that a realistic CRAY budget is \$10 million per year. It seems to me that somebody someplace had better be convinced that each of these 100 researchers is performing research valued at \$100,000 per year. This judgement is bound to be rather difficult if the researchers themselves perceive the cycles to be "free". It is hoped more than 100 would use it, but the same concern is still valid even if it is 1,000 or more researchers.

If space and time were available, there is much more that I could discuss. Topics such as:

1. How many researchers require a CRAY, where only a CRAY will do?
2. Why not consider less expensive and less powerful alternatives?
3. Is there an optimum system mix for the majority of U of T users?
4. Aren't some large scale needs poorly served by a CRAY?
5. Has the CRAY taken on the mantle of flagship and status symbol?
6. What are the obligations and costs of being an Ontario-wide Supercomputer facility?
7. Would vital non-CRAY computing needs on campus be compromised or sacrificed by the presence of the CRAY?
8. Why are smart money universities like Caltech, Columbia, Cornell,

Stanford, ... not entering the CRAY supercomputer acquisition game? (Ken Wilson at Cornell is going the IBM plus a huge FPS system route.)

9. Is it really advisable to use UTCS to manage the CRAY?

10. Isn't a research ancillary operation a preferred structure?

11. How well does Simcoe Hall administer computing matters?

12. Why wasn't the early CRAY proposal submitted for peer review?

Some of my colleagues are deeply concerned that the choice may be either the CRAY or nothing. I am not persuaded that this is necessarily so but even if it should be, I am firmly convinced that in that case the wisest course for our institution would be to refuse the \$10 million and if necessary start over again to solve the original problem. But surely we can find a better and more constructive alternative, one that provides the computing we need with the available \$10 million and is acceptable to the province. I am optimistic that this is possible and am convinced that we should try.

For example, excess supercomputer cycles are available in Canada. NSERC "free" cycles are going unused at the Dorval CRAY and U of T could explore the possibility of sharing the Mississauga or Richmond Hill supercomputers.

Finally, why am I spending so much time on something that only seems to waste those precious, irreversible seconds we all inherit only once? At times I am not sure and to remind myself I have to go back to something I wrote in the *Bulletin* a few years ago:

"What is important to me personally, however, is that as an institution we govern ourselves efficiently, and that we begin to establish an atmosphere where innovation, accountability and productivity are encouraged."

Footnote: Ref. 1. *Business Week*, Aug. 26, 1985, page 92A

George Luste is an associate chairman in the Department of Physics and heads the physics/astronomy/CITA VAX research computer consortium.



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# The University of Toronto in the Supercomputer Age

by John Bossons,  
Philipp P. Kronberg,  
Charles J. Lumsden,  
W. Richard Peltier

A new phase of the computer revolution is having a profound impact on basic and applied research. Like the computer-driven "office revolution", the less familiar "supercomputer revolution" is now beginning to change the way in which research is being done in many areas of physical and life sciences, engineering, social sciences and medicine. Entirely new avenues of experiment and discovery are now possible which 10 years ago were unthinkable.

A university which aims to train its students for international leadership must have the crucial tools. As Canada's largest research university, with the country's largest graduate school, it is vital that we at the U of T possess state-of-the-art computing power. For important sectors of our university, hands-on access to a supercomputer is needed if our credibility and competitive position as a world-class research university is to be maintained.

Although every generation's most powerful computer is "super" in a relative sense, there is a qualitative difference between the most powerful computational engines available today and what existed just a few years ago. These current machines are roughly 100 times as fast as a VAX 11/780, which is in turn about 100 times as fast as a standard IBM PC. This increase in power, combined with a large, fast memory, permits a qualitatively different kind of science to be carried out. Computers with such capability cost between \$10 million and \$20 million.

Very few companies currently are marketing these "leading edge" machines. The world's leading manufacturer is Cray Research in Minneapolis, which, since 1976, has placed approximately 150 CRAY-1, CRAY X-MP and CRAY-2 supercomputers worldwide, roughly three-quarters of the world supercomputer population. There are also 30 to 40 of Control Data's CYBER-205 supercomputers, and much smaller numbers of Amdahl-Fujitsu, IBM/FPS, and Hitachi supercomputers in place. Roughly half of these machines are fully devoted to academic research, and nearly all are in the US, Europe and Japan.

Virtually every important area of modern science and technology is being transformed by the existence of supercomputers. The major reason for this is that with the supercomputer it is possible for the first time to deal with the complexity which is characteristic of most natural systems.

In the physical sciences, the application of supercomputers has become pervasive. Examples:

- In theoretical astrophysics, the complex gravitational interactions among enormous numbers of stars in galactic systems which must be modelled to understand the process of galaxy formation

- In empirical astronomy, where a new, significant discovery of many pulsars near the centre of our galaxy was recently made by radio astronomers at the University of Manchester, using their local supercomputer as an extended signal processor. (This project alone took 160 hours of supercomputer time.)

- In high energy physics, the extraordinarily complex physics embodied within the field theory of quantum chromodynamics and in models of the force which binds individual nucleons together with the atomic nucleus

- In quantum chemistry, the massive calculations of energy states and field distributions needed to understand atomic and molecular reactions

- In climatology, the complex thermal and hydrodynamic interactions which are the key to modelling the extent and duration of the "nuclear winter" that would be caused by thermo-nuclear war

Supercomputers are beginning to yield significant results in biomedical research. The impact reaches down to the molecular fabric of life, where it is allowing us to visualize detailed space-time interplay of proteins, cell membranes, and genetic material within the cell, and assisting with the design of new molecules with pharmaceutical properties. Here too its contribution is in the modelling of complexity.

Examples:

- Mathematical models of the cellular networks of the brain which are clarifying the biological basis of mental activity

- The diverse interactions in many cells and organs during their development from embryo to adult

- Models of body functions in both health and disease, which are being combined with advanced techniques of image processing to yield a major advance in the clinical potential of sophisticated medical technologies like magnetic resonance imaging, PET scanning and radiological computed tomography

- The simulation and analysis of ecosystem dynamics and principal trends in biological evolution

In social science research, the supercomputer is only beginning to be used, but the potential impact is substantial. Examples:

- In modelling general economic equilibrium, realism introduces complexity. The supercomputer allows a significant advance in analyzing the complex economic effects of changes in government policy

- In applied econometrics, simulations of the sampling distributions of the parameters of complex econometric models permit calibration of their accuracy

- In sociology, modelling the interaction of individuals requires that the implications of learning and choice behaviour be worked through for large groups of people connected by common or different social networks

The supercomputer is also having a major impact in industry. In the past three to five years, new ideas, concepts and complex products have been designed, developed and even "prototype-tested" in supercomputers. Companies such as Bceing, GM, Chrysler, Nissan, Ford and GE have made major investments in supercomputers in order to replace wind tunnel tests, crash tests, test flights, and costly prototype-building with supercomputer model simulations. It is now possible for a single supercomputer to do most of the work of an entire test laboratory.

Canada has two supercomputers, a CRAY-1 belonging to Environment Canada at Dorval, Que. (used primarily for weather forecasting), and a CYBER-205 at the University of Calgary. This compares with at least 12 CRAYs and two CYBER-205s in

Britain, and comparable numbers in Germany and France. The Netherlands, with a population not much larger than Ontario's, has two supercomputers, one being fully devoted to academic research at the University of Amsterdam.

It was in Britain and Germany where governments first grasped the need to provide supercomputers for university research. The immediate result of this was a reverse "brain drain" between 1978 and 1984. Many prominent North American university professors made pilgrimages to such places as the Max-Planck-Institut in Munich and the Universities of London and Amsterdam, in order to access a supercomputer.

Concerned by this growing dependence on supercomputers in Europe, the US National Science Foundation (NSF) funded a program which has led to the establishment of four new national university supercomputing centres in the past year (at Cornell, Illinois, Princeton and San Diego). In addition to this NSF-funded initiative, other US universities have financed the purchase of a supercomputer from state, industry or other private sources. The University of Minnesota has now no less than four supercomputers (three CRAYs and a CYBER-205). Florida, Purdue, Texas and a Pittsburgh/Carnegie-Mellon consortium have recently established their own supercomputer facilities.

In Canada, only 10 percent of one of the two Canadian machines is available to the Canadian university community through an NSERC-sponsored program. This satisfies only a small fraction of the growing research need. Apart from this NSERC block-time purchase of time on the CRAY-1 at Dorval, there has been no national effort in Canada comparable to the government-sponsored initiatives in other countries. At the present time, Canada is falling seriously behind the worldwide supercomputer revolution to the detriment of its research capability.

A multidisciplinary group of researchers at U of T has met over the past 18 months to discuss the problem and possible solutions. The group alerted the University administration to the seriousness of the situation and its implications for the future of our university. The administration has asked the Ontario government for sufficient financial support to permit us to get "on board" with a state-of-the-art supercomputer.

The provincial government has responded positively to this initiative, and currently is considering making a grant of \$10 million to the U of T to finance the purchase of a CRAY supercomputer. The projected grant, which would pay for 80 percent of the capital cost of a CRAY X-MP/24 supercomputer, provides a one-time opportunity to equip this university with a world-class supercomputer facility.

The agreement by the province with our designation of a Cray supercomputer as the preferred machine reflects extensive analysis within the University and discussions with individual international experts and administrators of existing supercomputer installations. The major advantages of the Cray machine over competing alternatives include the extensive library of software developed by the large Cray user community worldwide, the machine's unique combination of speed and readily expand-



ible fast memory, and the extraordinary record of the company in contributing actively to maintain a high degree of user satisfaction at each of its installations. It is also important that there is a clear upgrade path in the Cray line of technology, which will guarantee against obsolescence.

It is the University's intention that a separate budgetary unit be set up to administer the supercomputer facility. Its director would be advised by an advisory committee which would include provincial officials and representatives of other Ontario universities.

It is expected that the supercomputer would be managed by UTCS under a facilities management contract. A detailed costing analysis indicates that this arrangement would take advantage of economies of scale in personnel, resulting in substantially lower incremental operating costs than if operated on a standalone basis.

The costing and financial analysis indicates that it should be possible to establish the proposed supercomputer facility at no net cost to the University. As with any new initiative, forecasts of costs and revenues are subject to some risk. However the risks are not large, (especially when weighed against the academic benefits) and the University's financial exposure is easily contained.

There is little uncertainty as to the nature of operating costs. Maintenance costs are fixed, though subject to inflationary adjustment.

Personnel costs are largely a matter of choice as to the quantity of support services. The cost projections in the proposal now before committees of the Governing Council reflect information obtained from a site visit to the University of Illinois CRAY X-MP/24 supercomputer facility, and from analyses of other operating centres.

It must be stressed that, unlike the NSF-supported "national centres", the University of Toronto proposal does not include support for new associated research oriented institutes. Nor, unlike the large US university centres, is its budget supporting the installation and operation of a national outside-user communications network. The bundling together of these different program components in the NSF budget for national supercomputer centres has confused some commentators on supercomputer costs, who have noted the considerable difference between the proposed U of T budget and that of the new NSF-sponsored centres.

With respect to revenues, the projected budget assumes that operating costs can be met by selling the use of about one-eighth of the time available on the supercomputer to commercial users. In this connection, it is worth noting that the potential use of the supercomputer by industry is one of the reasons for provincial government

*Continued on Page 18*



# Books

December

**Chants de la toundra**, by Pierre Léon (Editions Naaman/La Découverte; 143 pages; \$10; paper). These poems of five large Inuit groups constitute the first anthology of this kind in French. The poems were extracted by Léon from data collected in Canada by several anthropologists between 1925 and 1982 and emphasize the oral poetry of the angakoks, great priests and shamans who sing the miseries and joys of a stoic people.

**Ucrainica at the University of Toronto Library: A Catalogue of Holdings**, by Paul R. Magocsi\*, with the assistance of Nadia O. Diakun (U of T Press; 1,845 pages; two-volume set, \$75). This catalogue brings together the holdings of all U of T libraries in materials relating to Ukraine: some 11,000 titles organized under 31 subject headings and 80 subheadings. It represents a major step toward the creation of a union catalogue of Ucrainica in North American libraries.

**Dictionary of Canadian Biography**, Volume VIII: 1851-1860, General Editor, Frances G. Halpenny (U of T Press; 1,168 pages; \$60). The latest volume in this distinguished series profiles the lives of those who lived through the war of 1812, the rebellions of 1837-38 in Upper and Lower Canada, the rapid expansion of the Hudson's Bay Company, and tremendous growth in industry, business and education.

Catching Up

**November**  
**Convincing Americans**, by Jim Smith (Proper Tales Press; 60 pages; \$5; paper). The fourth book of poetry by Smith.

October

**The Economics of John Stuart Mill**, by Samuel Hollander (U of T Press; 1,044 pages; two-volume set, \$95). Hollander's study emphasizes economic methodology and social philosophy, examined in the light of Mill's own preoccupations.

*U of T staff are indicated by an asterisk when multiple authorship or editorship includes non-U of T staff.*



Chant (1975), by Agnes Nanogak, reproduced in *Chants de la toundra* by Pierre Léon, an anthology of Inuit poetry.

## Governing Council alumni nominations sought

On behalf of the College of Electors, the chairman, Brian O'Riordan, has issued a call for nominations for three alumni representatives to serve on the Governing Council from July 1, 1986 to June 30, 1989. The three-year terms of Eric Hardy (University College 1942), Burnett Thall (Engineering 1945) and Joanne Uyede (Innis 1969) expire on June 30, 1986. All are eligible for re-election.

The deadline for receipt of nominations is 4 p.m., *February 25*. Candidates will be invited to meet with the College of Electors.

Candidates must be alumni of the University and must not be members of the staff or students in the University; must be willing to attend frequent meetings of the Governing Council and

its committees; and must be Canadian citizens.

The *University of Toronto Act*, 1971 as amended by 1978, Chapter 88 defines alumni as "persons who have received degrees or post-secondary diplomas or certificates from the University, or persons who have completed one year of full-time studies, or the equivalent thereof as determined by the Governing Council, towards a degree, diploma or certificate and are no longer registered at the University."

Further information about Governing Council and nomination forms may be obtained from the secretary, College of Electors, room 106, Simcoe Hall at 978-6576.

## Election of chancellor

On behalf of the College of Electors, the chairman, Brian O'Riordan, has issued a call for nominations for the position of Chancellor at the University for a term of office commencing July 1, 1986 and ending June 30, 1989.

The *University of Toronto Act*, 1971 stipulates that the Chancellor must be a Canadian citizen.

The current Chancellor, George Ignatieff, is not eligible for re-election, having served the maximum number of two terms. The previous three chancellors were the Hon. Pauline M. McGibbon, Dr. Eva W.M. Macdonald and the Very Rev. Arthur B.B. Moore.

The Chancellor generally has three

main duties: granting all degrees at the spring and fall convocations; representing the University to the outside community, particularly alumni groups; and chairing the Committee for Honorary Degrees and being an *ex officio* voting member of the Governing Council and its standing committees.

Further information and nomination forms may be obtained by writing the secretary, College of Electors, room 106, Simcoe Hall, or by calling 978-6576. Nominations must be in the hands of the secretary of the College of Electors by 4 p.m. *February 25*.

## Forum

Continued from Page 17

support. The establishment of a supercomputer facility in the province will make an important contribution to provincial industrial strategy.

In the course of preparing a budget for the supercomputer, a number of potential commercial customers have been contacted. Several of these already buy significant amounts of supercomputer time in the US. It is reasonable to expect to sell more than the amount required to make the supercomputer facility self-financing.

It is anticipated that the resultant surplus will be accumulated to finance subsequent upgrades in supercomputer capacity.

Any significant new initiative poses some risks. However, in this case the financial risk to the University is small. Moreover, in the event that revenue forecasts are not met, there are several fall-back positions. While none of these fall-back positions is desirable (e.g. reducing costs by reducing support services) they could be implemented to limit further the University's exposure to financial risk.

For many of us who have been trying to bring the idea to life, the most exciting aspect of the proposed supercomputer installation at the University is the extent to which a world-class installation of this type has shown itself able to induce stimulating interactions among academics from a wide variety of fields. The diverse academic origins of the authors of this article illustrate this phenomenon.

As we work towards successful realization of this project, our hope is that it will embody, on a permanent and continuing basis, mechanisms to perpetuate the sense of intellectual enthusiasm and stimulation which has come from working for goals of high academic merit.

John Bossoms is a professor of economics and member of the Institute for Policy Analysis; Philipp P. Kronberg is a professor of astronomy and Guggenheim fellow; Charles J. Lumsden is a professor of medicine and Medical Research Council scholar in the University's Membrane Biology Group; and W. Richard Peltier, professor of physics, is chairman of the NSERC time allocation committee for the CRAY supercomputer at Dorval.

## Recommended dining

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Enter through a Japanese rock garden which sets the scene for gracious, relaxed dining in the Oriental tradition, surrounded by wicker, bamboo, and Japanese prints. You can dine Japanese style at low tables or, if you prefer, North American style with normal tables and chairs.



The service is efficient and polite no matter which you choose. Five course dinners present a selection of *sukiyaki*, *teriyaki*, *shabu shabu*, or *yosenabe* as the main course. The latter is prepared in a wok right at your table and consists of scallops, vegetables and tasty seaweed. The main course is accompanied by soup, *unomiso* salad (octopus, cucumber and shrimp), tempura, rice, dessert, and tea. Ambx, Chgs. 195 Richmond Street West. 977-9519. Noon-2:30 5 p.m. to 11 p.m. Mon-Fri. Sat. 5 p.m. to 11 p.m. Closed Sunday. \*\*\*\*

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a big iron pot which is kept hot at your table. The ingredients are boiled shrimp, lobster tail, crab legs, scallops, white fish and fish cake, green vegetables, and bonito stock. Soup, appetizer and dessert are included. Vegetarians will like the *shyo-jin-ryori* complete dinner - a fascinating mélange of crisp oriental vegetables. There is accommodation for parties of four or more. Licensed. Ambx, Chgs. 459 Church Street, 924-1303. Noon-2:30 5 p.m. to 11 p.m. Mon-Fri. Sat. 5 p.m. to 11 p.m. Closed Sunday. \*\*\*\*



# Letters

## Improper to invite South African ambassador

The petition below was delivered to President George Connell Jan. 13. We hope the *Bulletin* will be able to publish it.

Peter Rosenthal  
Department of Mathematics

The undersigned members of the faculty of the University of Toronto feel that  
i. it was improper to invite the South African ambassador to be an honorary visitor at a Hart House debate;  
ii. no official representatives of the government of South Africa should be invited to speak at the University of Toronto until apartheid has been completely dismantled.

Kay Armatage, women's studies;  
George W. Bancroft, education;  
Jonathan Barker, political science;  
Gregory Baum, religious studies;  
M. Bodemann, sociology; J.R. Brown, philosophy; Michael Bunce, social sciences, Scarborough; F.I. Case, French; S. Chawla, physical sciences, Scarborough; Nanda K. Choudhry, economics; Valerie Cooper-Weiss, career centre; Frank Cunningham, philosophy; Chandler Davis, mathematics; R.B. de Sousa, philosophy; Janice Drakich, social sciences, Scarborough; Keith Ellis, Spanish and Portuguese; Peter Fitting, French; Bonnie Fox, sociology; Karen Goldenthal, women's studies; Danny



Goldstick, philosophy; Joan E. Grusec, psychology; V. Hadzilacos, computer science; D.G. Hall, physical sciences, Scarborough; S. Halperin, mathematics; G.F. Israelstam, life sciences,

Scarborough; R.L. James, sociology; J.M. Kennedy, psychology; Bruce Kidd, physical and health education; E. Mendelsohn, mathematics; A. Mendelson, computer science; Louis Mignault, humanities, Scarborough; K. Morgan, philosophy, women's studies; Graeme Nicholson, philosophy; David Rayside, political science; Denise Reaume, law; E.C. Relf, geography; Joe Repka, mathematics; I.R. Robertson, history; H.S. Rosenthal, physical sciences, Scarborough; Peter Rosenthal, mathematics; J. Scherk, mathematics; Nabil Shalaby, physical sciences, Scarborough; Gavin Smith, anthropology; A. Tuzlak, sociology; S. Ungar, social sciences, Scarborough; Alasdair Urquhart, philosophy; Jack Wayne, sociology; D. Wiebe, Trinity College; David Wolfe, political science.

## Divestment not a clear-cut issue

Matters relating to South Africa have been raised in the correspondence columns of the *Bulletin* over the past year as a measure of University community concern.

The topic is usually portrayed as clear cut. For example the vote of UTFA to divest was virtually unanimous.

However, it is of interest that those who see divestment as the only solution often have their academic base in such departments as sociology and political science (see letters, *Bulletin*, Dec. 19). It is therefore important to ponder the views of less vocal members of the academic community who may nevertheless be expected to have an interest in human welfare. To this end, in the late summer of last year members of the Department of Medicine were polled to ascertain their views on divestment. The results at the time of the debate by Governing Council are shown.

Against Divestment	34
For Divestment	32
Undecided	3

On the question of hardship for the poor which would be caused by divestment the voting was:

No Hardship	3
Some Hardship	25
Extreme Hardship	38
Abstain	3

The majority of those against divestment saw extreme hardship while all those who saw no hardship, or abstained from answering the question, voted for divestment.

The majority of the respondents wrote comments. I have tried to abstract the main points in summary form and the rough numbers of people who made each point (some made more than one point, notably those against divestment).

## Wife-beating not a matter for levity

I am writing to express my concern over the unfortunate comment apparently made by Dan Lang, assistant vice-president (planning), with regard to the completion date of phase two of the Natural Resources Centre ("Why don't you ask me about something less controversial like beating my wife?")

The beating of spouses is, unhappily, a not uncommon occurrence, appar-

ently happening to one in 10 women who co-habit with a male. It is not a matter for levity.

I would hope that in future Dr. Lang would not express himself in that manner, or that the *Bulletin* would choose to edit out such comments.

Mirella Taiariol  
Personnel & Labour Relations  
Department

### Summary of Comments

#### For Divestment:

- (1) Only course of action
- (2) Blacks are ready for hardship
- (3) Apartheid is evil
- (4) South African government not moving
- (5) Hardship will be short term
- (6) Selective investment
- (7) It may prevent revolution
- (8) Other offending countries should be similarly treated
- (9) Only population control can solve problems

#### Against Divestment:

- (1) It would hurt the weakest and result in bloodshed; malnutrition; totalitarian government
- (2) Hypocritical to single out South Africa alone
- (3) We are manipulated by news media
- (4) The South African government is moving. Needs help to change
- (5) At present we are too ignorant to take action
- (6) Other parts of Africa are dependent on South Africa
- (7) Historical tragedy will repeat itself
- (8) Our own treatment of our aboriginal people is poor
- (9) We should be positive — offer cultural exchange

#### Abstainers:

- (1) We have insufficient knowledge of South Africa

Obviously this represents only a small sample of the total Department of Medicine. Nevertheless, it represents all those whose views were strong enough that they chose to respond.

In conclusion, at least in certain quarters of this university, the divestment issue is not seen as clear cut. There is evidence of concern over future hardship and the fact that we may be taking a political stand, possibly manipulated by more politically motivated members of our community. We have too little knowledge

and need to acquire more. The idea of positive investment both in industry and cultural exchange was raised by those on both sides of the divestment issue.

David J.A. Jenkins  
Departments of Nutritional Sciences  
and Medicine

## Joke in bad taste

Whether or not Dan Lang felt that his wife-beating quip, quoted in the article on the southwest campus project (Jan. 6), was humorous, I believe that I can state with a fair amount of certainty that most people would find it to be in exceedingly bad taste. Such a statement, coming from an individual who holds an important office in an institution of higher learning, is totally inappropriate.

J.L. Chadwick  
Administrative Assistant  
Office of Research Administration

## Remark not intended to give offence

I understand that the *Bulletin* has received two letters [see this page] which object to remarks that were attributed to me in a recent article.

I can give assurance that my remarks were not intended to give offence. Nor, as far as I know, was any offence taken by persons who were present when I made them.

Evidently, the account of my remarks which appeared in the *Bulletin's* report of the Dec. 16 meeting of the Planning & Resources Committee has been construed by some persons to be inappropriate. I can neither understand nor explain why the *Bulletin* chose to describe the meeting and my remarks as it did. But that is not important. Whatever the explanation or indeed whatever my intention, I am of course, regretful that some persons have been offended by my comments, however they may have been described.

Daniel W. Long  
Assistant Vice-President (Planning)  
and University Registrar

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# Classified

A classified ad costs \$5 for up to 35 words and \$25 for each additional word. Your name counts as one word, as does your phone number, but the components of your address will each be counted as a word. No charge for postal code.

A cheque or money order payable to University of Toronto must accompany your ad.

Ads must be submitted in writing, 10 days before *Bulletin* publication date, to Marion de Courcy-Ireland, Department of Communications, 45 Wilcocks St., Toronto, Ontario M5S 1A1. Ads will not be accepted over the phone.

## Accommodation Rentals Available - Metro

**House for rent.** Avenue Road/Lawrence, 1/2 hr TTC to U of T. Unfurnished. 3 bedrooms, semi-detached. 5 appliances, recreation room, broadloom, private drive, patio, large garden. February 1. One year lease. \$1,150 + utilities. 481-2610.

**Furnished house for rent.** 4 large bedrooms, huge main floor family room, secluded study, 6 appliances, 3 fireplaces, private driveway, deck, two blocks to schools, shopping, 15 minutes to U of T by bicycle. September '86 - July '87. \$1,400/month + utilities. Call 416-926-7148.

**Charlie-Bloor, minutes U of T.** 1-bedroom apts. plus den. Charming French doors. Large eat-in kitchen. \$560 monthly, utilities included. Upstairs 1-bedroom apt. \$550. Basement 1-bedroom apt., 12 ft. ceiling, eat-in kitchen, separate entrance \$420. 968-9392 evenings.

**Opposite U of T Bookroom.** 1-bedroom apts., renovated large eat-in kitchen, plus use of basement and backyard. \$570 monthly plus share utilities. Upstairs apt. \$550. You can crawl to your classroom! 968-9392 evenings.

**Large 3-bedroom house,** furnished, 2-1/2 bathrooms, finished basement, 6 appliances, pleasant garden. Quiet, residential neighbourhood one block to good school, St. Clair West subway, shops. Available Feb. 1st - July 1st or early August, 1986. \$1300/month. Jill Johnson, Royal LePage Real Estate Services Ltd., 921-1112

**Summer Rental.** Renovated furnished house. Living, dining, 3 large bedrooms, study, washer-dryer, skylights, atrium, balcony, exposed brick. Close to High Park. 10 minutes to campus by TTC. Available May-Sept 1986. \$760/month. 766-0595

**Cabbagetown.** Fully furnished, renovated Victorian row house, 3 bedrooms, 3 bathrooms, study, fireplace, deck, 6 appliances, walking distance to U of T. Ideal for family with young children. Available July '86 - July '87. \$1500/month + utilities. 920-1432

**4 bedrooms, large living room,** fireplace, dining room, all appliances, finished basement, deck and rocky garden. Quiet, residential neighbourhood one block to good school and Davisville subway, shops. Available Sept. July/86-87. \$1,600/month. Call (416) 482-4523.

**Annex, Bloor-Bathurst area.** Furnished three bedroom renovated semi. 3 washrooms, 5 appliances, garage. 15 minutes walk to campus. June 1, 1986 July 31, 1987. \$1300 + 925-4010.

**Duplex for Rent.** Spacious lower 1 bedroom. Two floors, open-concept, 5 appliances, broadloom, laundry, yard parking. \$750 + Upper 1 bedroom, living room, kitchen, bathroom, broadloom, parking. \$595 +. Greenwood location. Available immediately. 466-0146.

**Cabbagetown house,** near Carlton/Parliament, 15 min TTC to U of T, fully furnished, 4 bedrooms, garden, washer/dryer. Available for 5 months April 1-Sept 1, 1986 \$350 mo. plus utilities \$35 mo. Call 921-3210 or 978-6493.

**Gracious North Toronto home** available during sabbatical leave, July 86-July 87, furnished in antiques, three bedrooms, five appliances, breakfast room, playroom, garden, garage, Wanless Park, 5 minute walk to Lawrence subway. 484-1514, \$1400/month plus utilities.

**Mt. Pleasant/Bayview/Eglinton Area.** 2 bedroom apartment, fully furnished, all utilities and cleaning included (except phone and cable t.v.). Parking, garden. \$850/month. Immediate occupancy. 483-1736 or 483-1467.

**Forest Hill Village** (Spadina Rd./Lonsdale). Only ten mins. to campus. 3 bedroom house: separate dining and living rooms, modern kitchen, breakfast nook, 5 appliances, garage. One year lease. 481-7266.

**Riverdale close to TTC.** A three bedroom renovated house. Garage. Open plan living, dining, kitchen. Appliances + washer/dryer. Bookcases, fireplace. \$1,200/month + utilities. References. Available March 7. 429-7854 evenings.

## Accommodation Rentals Required

**Reliable couple** seeks central accommodation approx. February 15 - June 15 while own house is renovated. Call 483-7822 evenings or leave message at 484-2711 days for Chris.

**Professor/dentist and wife** require furnished accommodation during study leave University of Toronto, July to December 1986. No children but two cats (well trained). Exchange possible University of Alberta (Edmonton) or separate arrangement. Will take excellent care of your home. Photo appreciated. Dr. R.L. Ellis, 1043 Dent/Pharm. Centre, University of Alberta, Edmonton, Alberta, T6G 2N8 or (403) 432-3631.

**University professor,** visiting the University of Toronto seeks a 3 bedroom + study room or 4 bedroom furnished apartment for the period between end of January to June or July. Please contact Professor V. Jurdevic, 978-6208.

**Professional family** with three school-aged children needs a house to rent while own home is being renovated. 3 bedrooms and furnished, if possible, April-August. Dr. M. Tepitsky - 922-4285. Please leave message.

**Responsible couple** (lawyer, doctoral student) seeking unfurnished 2 bedroom apartment or flat for early spring (March or April). Must be spacious, quiet and downtown (or close to it). References available. Call 960-8223 or 921-8804 (evenings).

## Accommodation Shared/Exchanges

**Non-smoking, centrally** located quiet co-op house seeks fifth member, over 25 preferred, to share cooking, shopping, chores. \$257 incl. March 1. 928-0326 or 928-0332.

**Share with a senior.** Enjoy affordable rent, share costs, responsibilities, companionship. SHARING, a non-profit service, matches for compatibility Call 591-1657 for an appointment or further information.

## Accommodation Overseas

**Sabbatical in Avignon,** restored ancient farm house, secluded, not isolated, magnificent views. 4 bedrooms, 2 bathrooms, fully furnished (stereo, T.V., washer, etc.). wonderful 2 room schoolhouse nearby. Sept. 1, 1986 - June 20, 1987; \$700/month. 978-8637.

**Amsterdam near Amstel River.** For rent: renovated attic, close to all public transportation. Sleeps 2-3. \$175 p.w. 284-5058 after 5 p.m.

## Vacation/Leisure

**Clearwater, Florida.** 3 bedroom home. Close to beaches, tennis and golf. Ideal for 1 or 2 families. US\$275/week. April-November. US\$325/week. December-March. extended rates on request. 978-7078 or 593-5186.

**MALVERNS/COTSWOLDS.** Enjoy B&B with a difference. Escape the usual tourist routes and explore the U.K.'s loveliest countryside from our 18th century beamed farmhouse. Canadian and wife offer warm hospitality and gourmet food as well as assistance in planning holiday visits to cathedrals, stately homes and country byways. Toronto references available. Details from: Muriel Pushman, Danemore Farm, Welland, Nr. Malvern, Worcestershire, WR13 6NJ.

**Backpack Canada, United States & South America.** Adventure some backpacking treks in the magnificent Canadian Rockies, the Grand Canyon in Arizona, the lower Appalachians during the autumn colour season, the Florida Trail, but hopping in the White Mountains of New Hampshire, the Grand Tetons of Wyoming, the Andes Mountains of PERU, the Weminuche Wilderness of San Juan National Forest in Colorado and other exciting treks. For those who feel a full backpacking trip would be too difficult, we have some trips where we hike out daily from a base camp in scenic backcountry areas. No experience required. Trips are 7 to 10 days' duration. Request brochure. WILLARD'S ADVENTURE EXPEDITIONS, Box 10, Barrie, Ontario, Canada L4M 4S9. (705) 737-1881 daytime, (705) 728-4787 evenings.

**HIKING AND CYCLING** in style throughout the summer and fall of 1986. Switzerland, Austria, Italy (Dolomites), England, Nepal. Experienced guides, good food and accommodation, fun. Call Dolomite Tours Ltd. (416) 486-7472.

**TRAVELLING COMPANIONS WANTED** for a 3 month trip of Mediterranean Europe/North Africa. I am organizing a mixed group of 4 to 6 adventuresome individuals for unstructured leisurely meandering in a minibus. February 1986 start in Portugal - then to Spain/Morocco/Balearic Islands/Southern

France-Italy-Greece. Return to Paris in April. Phone: Chris (416) 923-0912.

## Secretarial

**Typing of books, theses, articles.** Fifteen years' academic, legal, medical experience. Excellent work. IBM Correcting Electric III. \$1.35 each double-spaced text page. (20 page minimum) Pam, 925-4967. St. George Street, north of Bloor.

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**Professional Word Processing ("camera ready" copy),** photocopying, transcription. Specializing in theses, scientific reports, multiple repetitive letters and persuasive resumes. Sterling University References. On campus - 81 Harbord St. at Spadina. 968-6327.

**BUSY FINGERS** Secretarial Services - We offer fast and accurate typing of essays, theses, academic papers, etc. Satisfaction guaranteed. 1050-A Bloor St. W., Toronto, 532-5101.

**AFT Word Processing.** "Today's Secretarial Service". Professional, fast, accurate and reasonable rates. For all your repetitive chores and typing needs, specializing in letters, reports, manuscripts, theses, essays, books, etc., call now at 524-5287.

**Word Processing Typing.** Theses, Resumes, Manuscripts, Reports, Letters, Labels, Envelopes. We provide final copy on plain bond for photocopying or on your letterhead. Call The Word Processing Professionals 593-6250. WORDWRAP Inc., 111 Elizabeth Street, (Downtown).

## Miscellaneous

**Passport photos** now on campus. B/W Polaroid, 2 for \$6.50 (incl. tax, cash or internal code only) Wednesdays 10-2, Inst. Media Services, Rm 021, Best Inst. 112 College St. 978-8919.

**Your Own Credit Union.** If you are employed by the U of T you can join the Universities and Colleges Credit Union (Unicoll). For further information call 978-5505 and ask for the member services department.

**BEEF BEEF BEEF** Grain fed young beef for your freezer. Tenderness and flavour guaranteed. Government inspected. Raised on faculty member's farm, priced below market, and delivered in Metro. Contact Professor Bruce Conche evenings through 492-7764 or weekends at 613-478-5205

**Professionals Only** Singles Registry and Introduction Agency for University Graduates aged 25 to 45. (Proof required.) Established 1981; over 1583 registered. Registry parties: opera, theatre, wine tastings, guest speakers, dances, etcetera, for \$32 and up. Introduction agency arranges personal introductions for \$675. 927-PEER.

**Accent Need Adjustment?** Workshops forming with "accent" on production and formation of the English sound system. English pronunciation and intonation patterns. Small groups, ten weekly sessions. Personalized attention. Christine Gandy, B.A., Reg. OSHA Language/Speech Pathologist 767-6691.

**MICROCOMPUTERS AND RESEARCH.** Our company specializes in training, consulting and programming on the IBM PC/XT/AT and compatibles.

We are interested in working with researchers, in the sciences and medicine especially, who need specialized computer programs as part of their research efforts. We can help in all phases of the implementation of microcomputers for research applications, from the choice of hardware, through the design and development of sophisticated customized programs.

We have, in the past year, done work of various types for several departments and faculties at U of T, as well as for corporate and institutional clients. Specifically, we have designed, written and implemented a number of customized database applications, and several statistically oriented, data analysis projects.

In addition, we have trained hundreds of managers, and business people in the use of microcomputers, in particular the use of Lotus 1-2-3, dBASEIII, Symphony, DOS, and several word processing packages.

Why don't you call us to discuss, with no obligation how we can help you. VISION COMPUTER EDUCATION INC. 654-3033.

**Weight Control Effectiveness Program.** An alternative to dieting & overeating. A group program designed for gradual weight loss, for developing a positive self-image and for reducing guilt around eating. Registration deadline: Jan. 22, 1986 on a first come first served basis. Contact Magdalenine Agrahtout, M.A. tel: 928-3117

**Study of sexual harassment: participants wanted.** Women who have experienced any form of sexual harassment in an academic setting are wanted for an in-depth interview concerning the sexual harassment episode.

This is a social psychological study to analyze the kinds of interactions and behaviours that occur in sexual harassment, what the victims of sexual harassment experience, and how they respond.

Confidentiality is guaranteed. The names of interviewees and identifying details of sexual harassment will not be divulged to professors, university authorities or any other interested parties.

Would women who are interested in being interviewed please leave a message for. Robyn 534-5870.

**Babysitter required** for occasional weekends/evenings in Coxwell/Danforth area. Will pay \$2.00/hr. Call Maureen 978-4312 or 461-9351. (Non smokers only)

## THE DEPARTMENT OF HISTORY University of Toronto announces THE SEAGRAM LECTURES by Professor Bruce G. Trigger Anthropologist and Archaeologist McGill University Montreal

Lecture I - Monday, 3 February 1986

The Historian's Indian:  
Native Americans in Canadian Historical Writing  
from Charlevoix to the Present

Lecture II - Wednesday, 5 February 1986

Evolutionism, Romanticism  
and 'People without History': Putting Native People  
into Historical Context

Place: George Ignatieff Theatre  
Time: 4-6 p.m.